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EDUCATION

A Monthly Magazine,

DEVOTED TO

THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

FRANK H. KASSON and FRANK H. PALMER

EDITORS.

VOLUME XII.

SEPTEMBER, 1891 — JUNE, 1892.

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EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY, AND LITERATURE OF EDUCATION.

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EIGHTY-EIGHT YEARS RUNNING A BOUNDARY.

A STUDY IN HISTORY.

BY WILLIAM BARROWS, D. D., AUTHOR OF "OREGON," "THE UNITED STATES OF YESTERDAY AND OF TOMORROW," ETC.

THE surrender of Cornwallis and the treaty of 1783 conceded the nationality of the American Republic. It was with diplomatic struggle that we secured the Great Lakes for its northern and the Mississippi for its western boundary. The English, French and Spanish commissioners would limit the young nation to the watershed of the Alleghanies. Oswald had much English positiveness and almost presumptiveness in this direction, and was aided by the French and Spanish counsellors, whose governments had much territory thinly peopled and but poorly defined lying on the west and south of the coming Republic. But in colonial times the dominion of the thirteen colonies was supposed to extend back from the Atlantic seaboard as far as Great Britain had a just claim, as against France and Spain. When, therefore they assumed and gained independence they presumed that the change affected government only and not boundaries, and that which was theirs formerly, became, by independence their own in sovereignty. The three powers which raised a doubt by their commissioners, had reason to inquire unto what this new nation might grow, whose prospects were so august and prophetic, opening so indefinitely into the wild unknown. A European Great Britain, or Spain or France even could be quietly and obscurely

bestowed in the untrodden and unmeasured latitudes and longitudes that lay off somewhere to the west of the new-born nation. The records are explicit, but we cannot stop to cite them, of the grave conferences among the tripartite commissioners, how they might limit the area to be assigned to their young rival. Nor had this been a silent question in their cabinets in Europe during the eight years of struggle, when points of aid and neutrality and recognition pressed on them. Hence the struggle for limitation of territory in the treaty. Oswald for the English, and Vergennes and Rayneval for the French, and Aranda for Spain, would run the line along the watershed that divides the flow between the Atlantic on the one side and the St. Lawrence and Mississippi on the other. But Jay and Franklin were inflexible, and for a time the issue still lay between the pen of the diplomat and the resumed sword of Cornwallis. Jay said: "We shall be content with no boundary short of the Mississippi."[1]

But the first struggle ended peacefully, and as between England and her disobedient and successful colonies the line was to run up the St. Lawrence and the Great Lakes through a smaller chain to the Lake of the Woods. Of course the boundary must be marked for the house lot for the new nation's building, by courses and distances, as the engineers say. At first this would seem to be a simple process; and yet it was eighty-eight years before the United States and Great Britain completed the line of demarkation. For in 1783, American geography was yet in the haze of its morning twilight. Geographers had not even then escaped from the delusion of Columbus in which he dared his great achievement and died, that America was an archipelago lying between Europe and Asia. The best navigators of the age were still exploring for an inland passage from the Atlantic to the Pacific. In 1766–'8, Captain Jonathan Carver, a soldier of the frontier in the French war, had pursued this chimera in the regions of the Upper Superior and the country of the Sioux. He there discovered a river, which was said to bear the name of Oregon, and that flowed into the Pacific. He recommended to the English to open, through it, the long-sought route for commerce to China and the East Indies.[2] California was for a long time regarded as one of the Islands of the American Archipelago, and "on the early

[1] Bancroft, x: 579.

[2] Travels throughout the Interior Parts of North America, 1766–1768, by Jonathan Carver. 1813.

Spanish maps the Mississippi is not distinguishable from other affluents of the Gulf," says Parkman, in his "Discovery of the Great West."

On Morse's map of the United States, quarto, 1822, a river is laid down as rising west of Salt Lake and emptying into the Pacific near San Francisco, with the legend: "Supposed river between the Buena Ventura and the Bay of San Francisco, which will probably be the communication between the Atlantic and the Pacific." And what is more surprising in the ignorance of American geography is this remark by Monette, published in 1846: "To the disappointment of the commercial world this route [the Straits of Anian], still remains as much unknown as it was two hundred years ago: and such it will remain until it is opened by the way of the Oregon River or the Bay of California."[1]

And a gross darkness must at the same time have prevailed in Europe over American geography. For when General Kniphausen was bringing over his Hessians, the English mercenaries, to fight our fathers, he was bewildered with the notion that America was but an island in a cluster lying between Europe and Asia. In the tedium of the long voyage, with head winds, heavy fogs and dark nights, and alarmed and half-mutinous soldiers, he approached the captain with deference and the suggestion that in the heavy weather and dark nights they might unwittingly have sailed by America!

After the treaty of peace was signed, fixing the St. Croix as our initial eastern boundary, it became a grave question, and matter for a second conference what river was the true St. Croix. When the head of the Mississippi and the Lake of the Woods were made boundary points on the northwest, their supposed relative positions to each other were more than a hundred miles out of the way. From the northwestern point of the Lake of the Woods the line was to run "due west" to the Mississippi. But the head of the Mississippi was a hundred miles and more to the south.

In 1770, only thirteen years before, Archbishop Lorenzana had published at the city of Mexico, his history of New Spain, and in it he says: "It is doubtful if the country of New Spain does not border on Tartary and Greenland — by the way of California on the former, and by New Mexico on the latter."

[1] Monette's History of the Mississippi Valley, I: 123.

Spain "claimed under the name of Florida the whole seacoast as far as Newfoundland, and even to the remotest north. Canada was a part of Florida." — *Bancroft's U. S.*, I., 67.

Great Britain and the United States, being weary of the war, and in a wilderness continent, where land seemed superfluous, were willing to make boundary points by assumption, and set hypothetic metes and bounds on a liberal guess, and in lands that neither party had seen, or cared much for. One case will illustrate the perplexity and tediousness and possible irritations in running this line. It was stipulated that from the common bound on the St. Lawrence, on the forty-fifth degree of latitude, the line should take the middle of the river and of the lakes Ontario, Erie, and Huron, to the foot of the Neebish Rapids or Sault at the outlet of Lake Superior. In doing this the commissioners found it necessary to agree upon, name and map out about one hundred and eighty islands on the immediate right and left of the dividing line between the two nations. They were about seven and a half years in marking this section of the boundary.

One hundred and fifty years before, St. Lusson, with his fifteen white men, Joliet and Perrot being of them, and fourteen Indian tribes, had raised over the Neebish Rapids and the Sault St. Marie, the banner of Louis XIV. Louis XIV. was then thirty-three years of age, and in the twenty-ninth year of his reign, the rising star in Europe, and of exceeding brilliancy. In that magic name St. Lusson took possession, with much ceremony, of the Great Lakes and all the countries they drained, and all lands discovered, or to be discovered, between the North Sea, and the West Sea, and the South Sea. Then Great Britain was inferior and anxious in the new world and the United States were unborn. Now, as Great Britain and the United States pass along with their joint commissioners and corps of engineers, dividing the country between them, only some saintly names of places indicate that the French had ever been there. That brilliant reflection of the Court of Versailles was as flitting at the Sault as the flowers and fragrance of that fourteenth of leafy June, 1671, when they there proclaimed "The Grand Monarch." Under eight treaties and fifteen specifications, this line between the United States and British America was agreed to. The work of eighty-eight years was completed in 1872, by the arbitration of the emperor of Germany,

to whom the two nations submitted the question of the "middle of the channel" and so the boundary between the mainland and Vancouver's Island.

An explanation is here interjected. By the treaty between the United States and Great Britain, concluded June 15, 1846, it was agreed that the boundary line between the territories of the two, already established on the forty-ninth parallel to the Rocky Mountains, should be continued on the same parallel "to the middle of the channel which separates the continent from Vancouver's Island, and thence southerly, through the middle of the said channel and of Fuca's Straits to the Pacific Ocean." A dispute arose between the two high contracting parties as to which is the channel intended. The English commissioners claimed that it was the Rosario Straits, and the American that it was the Canal de Haro. The former was an inferior channel running near the continent, while the latter was a much larger channel, and nearer to Vancouver. Between the two were many and important islands, specially, San Juan, the ownership of which the English commissioners coveted; and long diplomatic delays and failures followed. The English claims seem to have been frivolous and pretentious, as in framing the treaty the one great channel and most in use for commerce — the De Haro — could have been the only one in mind by both the contracting parties. The dispute was referred to the Emperor William for arbitration, and he decided that "the line drawn through the canal De Haro is most in accordance with the true interpretation of the treaty." This award was made in 1872, interpreting and settling the treaty made in 1846.

In the arbitration before the Emperor it was provided that each party might state its case in a memorial or argument, with a single reply each to the other's paper. Mr. George Bancroft, the eminent historian, presented the American side. Familiar with the court of Berlin, as having been the American Minister there, versed in the case as a student of history, on agreeable terms with the Emperor, he was admirably fitted for the difficult work which he handled so successfully. The paper does eminent honor, even to one already crowned by varied achievements in scholarship and diplomacy.

For the first time, then, by this award, and in eighty-eight years, we are without any controversy with Great Britain on a boundary

question, or as President Grant states it in announcing the treaty in his Message of December, 1872, "For the first time in the history of the United States as a nation we are without a question of disputed boundary between our territory and the possessions of Great Britain on this continent."

CIVIC INSTRUCTION.

BY A. TOLMAN SMITH, WASHINGTON, D. C.

CIVICS is a new word in school programmes. It marks a new conception of an old idea, a step in the development of the political consciousness and the political insight of a race. The idea meets us wherever public schools have been formally constituted, but for the most part it is expressed in vague or general terms which have had either no real issue in practical courses of instruction or have been made subservient to the arbitrary doctrines of despotic power. "Knowledge of the Capital laws" was one of the objects specified in the first educational ordinance passed by the Massachusetts colony, 1642. This preceded by nearly a century and a quarter the "General Regulations" issued by Frederick the Great for the conduct of schools in which also an avowed object was to insure to future ages "better and more skillful subjects."

Opposite policies developed from these two expressions of a common principle. In Massachusetts instruction in the universal elements of knowledge has been regarded as the natural antecedent of political enlightenment. In Prussia, obedience to authority has been expressly inculcated as the supreme essence of good citizenship. In the one case, too much has been taken for granted, in the other, too much has been suppressed. Naturally enough it is not among Anglo Saxons that the subject has received the specialization that was requisite and inevitable. Local self-government as maintained among Germanic peoples is civic education; wherever town meetings and primaries are authoritative institutions there grows up naturally the consciousness of public rights and duties, the sense of political personality. Under highly centralized governments, on the contrary, this consciousness is repressed; roused it may be at times to spasmodic effort, but it has

no abiding force, hence, a weakness in the body politic wherever democracies rise from the ruins of imperialism. This explains the specialization of civic instruction in the schools of France.

The idea is not an outcome of the French Revolution, as is sometimes represented, rather the Revolution was precipitated by the ferment of the idea. Singularly enough it is traced to Rousseau's Emile, although in that ideal system of education the ties which bind men together, public duties and obligations, are ignored.

"My pupil," says Rousseau, "understands no other science but that of nature. He does not so much as know the name of history nor the meaning of the words metaphysics and morality. He is acquainted with the essential relations of man to things, but with none of the moral relations between man and man." "* * * He consideres himself without any connection with others. He requires nothing of any man and believes no man has a right to require anything of him." Despite, however, the isolation in which the author placed the subject of his natural scheme of education his prescient wit disclosed the germ of a new order of society. Henceforth education ceased to be simply a means of forming passive instruments or servile subjects; the perfection of individuals, the development of natural powers was seen to be its supreme purpose. From this thought all those memorials, petitions, and projects of law which crowded upon each other in the fateful days of the Revolution and the first Republic drew their inspirations. Men of affairs were quick to discern the social application of the principle.

"Heretofore," said La Chalotais, "we have had an education which was fit for nothing more than to form subjects for the school. The public welfare, the honor of the nation demand that we should substitute for this civil education which shall prepare each coming generation to perform successfully all public functions." * * * "Since education should prepare citizens for the State, it is evident that it should relate to the constitution and laws of the State."

Talleyrand demanded "a new catechism which should make known the nature and requirements of the constitution since men were to live under its laws and defend it at the peril of their life." On this subject there was an absolute unanimity of opinion among the reformers who differed widely on all others.

The imperial will of Napoleon put a sudden end to the new

aspirations. The sum of public virtue in his system was fidelity to the Emperor; this was to be the basis and the end of school instruction. The dream of civic education vanished to be heard of no more until the Revolution of 1848. The brief period of the second Republic hardly sufficed for the revival of the idea. It found expression, it is true, in the project of law submitted June 30, 1848, by M. Carnot. It is also significant that among the new chairs instituted at that time in the college of France were several for the study of law in its various aspects, international, political, administrative. The structure of the State, its relations, its powers, the principles from which these spring were to form part and parcel of the higher education from which in time all lower grades receive impulse and direction. These measures were interrupted by the second empire, but, as events in the neighboring states and subsequent events in France showed, the conviction of the importance of education in citizenship became the stronger the more its manifestion was suppressed. The leaders of the Republic of 1870 not only revived the subject, but they showed in so doing that the lessons of a century had not been fruitless.

One of the earliest measures of the Republican government was the appointment of a commission to elaborate a project of law relative to public instruction. It was composed of men who realized that the chief need of France was a body of citizens informed as to the underlying principles and the structure of a free state and devoted to its interests. The opinion of these men as to the means of developing this spirit were fixed and positive. Since it must be universal and ineradicable, nothing short of national, free schools would meet the requirement. In the ability of the schools to accomplish this work was to be found the warrant for their support by public funds.

On the sixth of December, 1879, the project of law was reported to the Chamber of Deputies by the chairman of the commission, Paul Bert. This law which bears unmistakable marks of the keen and discriminating mind of its eloquent advocate, starts out with a precise enumeration of the subjects of elementary instruction. The list is headed by moral and civic instruction, no mention being made of religious instruction which had figured in the imperial programmes. A hot contest was waged over the change, and it is noticeable that the same anathemas were hurled against

civic as against moral instruction. The two were indeed confounded together as a scheme for making "godless schools." In spite of opposition, however, the government stood firm in its purpose and the project became the law of the land without any change in the first proposition. From the promulgation of this law (March 28, 1882,) is to be dated the use of this specific expression in elementary programmes.

The subject having been differentiated from all other historical and sociological topics it still remained to indicate its scope and contents. This was accomplished in the programmes which were issued a few months after the passage of the law. They began by separating civic instruction entirely from moral. Said Jules Ferry in an address before the Pedagogic conference of 1883, "The programmes have marked this separation in every manner." Civic instruction finds its place in the division of "intellectual education and it includes notions, positive, concrete and perfectly coördinated relative to the organization of society and of public powers. To these are added a little ordinary law, a little political economy, all subjects which belong to didactic and catechetic instruction as it is called, all subjects which cannot be taught by the master alone, but which require a text-book to supplement his teachings."

Moral instruction, on the contrary, was placed by itself, treated not as a subject for didactic instruction, but as that which should pervade all other exercises of the school.

In giving precise title to the instruction which relates to citizenship and in the analysis of the subject thus formulated the French have rendered service to all nations, at least to all those whose schools are to be the nurseries of free institutions.

It is exactly at this point that our own efforts in this direction have been feeble and diffuse, and it is here that we can profit by a study of French precedents. The elaboration of the subject in the programmes referred to is as follows: —

CIVIC INSTRUCTION.

General notions respecting the political, administrative and judicial organization of France. The citizen, his obligations and his rights; school obligation, the military service, imposts, universal suffrage;

The commune, the mayor and the municipal council; The department, the prefect and the council general;

The state, civil and penal jurisdiction;

The constitution, the president of the republic, the senate, the chamber of deputies, the law; — diverse authorities; — the several grades of instruction; — public force, the army.

With slight modification the scheme would be applicable to our own country.

More suggestive, however, than the programmes are the text-books which the subject has inspired in France. Forty-six appeared within a year of the passage of the law, most of them bearing the names of distinguished authors. If we want to know how to impart fascination to a technical subject, we should study these works. The most remarkable is undoubtedly a small volume of less than two hundred pages, by Paul Bert. The lucidity and precision characteristic of that author are here combined with a dramatic force which gives a flavor of personality to the whole composition. France seems to be the heroine of a romance in danger from traitorous sons and alien foes and trusting for safety to the fidelity of her youngest scions. The same pages that explain in the most direct and simple manner, the nature of civil authorities, the meaning and applications of such terms as impost, elector, ballot, etc., by means of vivid illustrations rehearse the story of a century and insidiously instil into susceptible minds, hatred of ancient tyrannies and threatening foes. The book is a revelation as to the power of method, but can scarcely be regarded as a model for imitation. "Devoirs et droits de l' homme," a work by Henri Marion, well known as a philosophical writer, is quite as remarkable in its way. It compasses the entire round of man's relations, disclosing in a simple but impressive manner the fundamental principles from which all obligations arise. It is serious without being dull, and didactic without being tedious.

It would be interesting to know in view of the specialization, analysis and skillful treatment of the subject if the outcome of civic instruction in French schools is commensurate with the preparation that has been made for it. This is an inquiry which it is difficult to answer, for two reasons: The general effects of the instruction are inextricably mingled with the effects of other parts of education in that elusive total which we call character. The specific results are necessarily various. In spite of the exam-

ple of clearness and precision in programmes and text-books the teachers themselves are often vague and prosy in their treatment of the lessons, the subject is taken up irregularly and infrequently and awakens little response in the pupils. On the other hand, there are teachers whose aim and method are painfully precise and narrow. Their civic catechism is illustrated by the questions and answers which Mathew Arnold heard: "When are you a Frenchman"? Answer: "When born into the world." "When a soldier"? "When born in France." "And when your father, too, is born in France." "Well, what is the first duty of a Frenchman"? Answer, by chorus of voices: "The military service." "And what is the object of that"? "To kill our enemies." This is perhaps pardonable under the circumstances, but it is not in the line of international amity.

A better idea of the advantages of the instruction may be formed from the results in other countries where it is not directly associated with a national crisis, as for instance, in Sweden and certain cantons of Switzerland. In the former, instruction in public relations and obligations forms a feature of the courses in Swedish history, in the latter the subject is specialized as in France, the same title, i. e., civic instruction, appearing in many of the programmes. Naturally in Sweden the instruction tends rather to the doctrine of obedience to authority, and in the Swiss cantons to that of individual rights and obligations. Fundamentally, however, the purpose is the same in both countries. Expressed in the saying of Montesquieu, it is "to make the bonds of education harmonize with the principles of the government."

This is the end for which France is striving. This is the end for which we, also, must make determined efforts as against the political ignorance and vagaries or the personal egotism of our foreign-born population.

THE WILL AND THE WAY.

BY WILLIAM M. THAYER, FRANKLIN, MASS.

MANY people fail to appreciate the place and power of the will in their earthly career. The old adage, "Where there's a will, there's a way," appears to them extravagant, if not altogether untrue. They can hardly believe that the human will is so mighty — that a man can hew his way to success against the greatest obstacles if he have determination enough. His will may overcome most difficulties, perhaps nearly all, they think, but to surmount some obstacles which they have known about, appears to them incredible. Nevertheless, the maxim contains a well established truth. The lives of successful men bristle with telling points on this subject. But for will power all other power would have been fruitless. This commanded the faculties of the soul and manipulated them as a general manipulates his army. An army without a general would be a mob, as a man without a will would be a wreck. The careers of all great men prove this. The will rules to bless or ruin. Shakespeare says, —

> "Muse not that I thus suddenly proceed;
> For what I will, I will — and there's an end."

The late Bayard Taylor, at twelve years of age desired, more than anything else, to be a poet and a traveller. He was a farmer's boy, poor but resolute. He learned to read at four, and at twelve, he had read all the books of the small circulating library of Kennett Square, the town in which he was born, (Jan. 11, 1825), near Philadelphia; also, Cooper's novels, and Gibbon's, Robertson's and Hume's histories. He was very familiar, too, with Milton, Scott, Byron and Wordsworth; and his mother often heard him repeating poetry from these authors to his brother after retiring for the night. But this precocity did not promise to open the door to fame for him. There was little money in the family, and the farm needed hard work more than poetry or acquaintance with Europe or any other country. In these circumstances there was no prospect that his dream would be realized, though he confidently expected it would.

At sixteen he was teaching school, an employment that he disliked as much as it disliked him. As school-teacher he was a fail-

ure. His aspirations were in another direction. At this time Charles Dickens was lecturing in this country, and Bayard received his autograph through a friend; and he wrote in his diary as follows: —

"It was not without a feeling of ambition that I looked upon it; that as he, a humble clerk, had risen to be the guest of a mighty nation, so I, a humble pedagogue, might, by unremitted and arduous intellectual and moral exertion, become a light, a star, among the names of my country. May it be!"

These words show that, in his heart, his destiny was settled. His will would make a way. Poverty might interpose. His environment might mock his ambition. Friends even might dissuade him. But his spirit had begun to soar, and soar it would.

One of his poems had been published at this time in the *Saturday Evening Post;* and this was an era in his life. It strengthened his resolution. His will became invincible, and said, "If there is no way I will make one."

Failing as a pedagogue, he became a printer, and, for four years, made a success of printers' ink, improving every leisure moment in reading and writing poetry. At nineteen, he walked to Philadelphia, thirty miles, to find a publisher for fifteen of his poems. He wanted to see them printed in a book; but no publisher would undertake it. He returned to his home whistling, however, showing that his courage and resolution were not abated. To add to his trials the parents of the girl he loved with all the ardor of his soul, forbade his seeing her.

He resolved to visit Europe. "Where will you get money for the trip?" his mother very naturally inquired. "I cannot say now," Bayard answered, "but I am certain that it will come." Here faith was married to his will, and he was stronger than ever. He went to Philadelphia to secure the position of European correspondent of newspapers; but the proprietors of newspapers politely declined his proposition. He was about to return discomfited, when his will asserted itself, and he said, "I will not give it up so; I will not be beaten." Then his importunity pushed to the front, and he returned to newspaper offices to plead: and now he was successful. The proprietors of the *Saturday Evening Post* and the *United States Gazette*, each offered him fifty dollars in advance for twelve letters, and they would take more at the same rate if the letters were good. Having

several of his poems with him, he resolved, in the same unconquerable spirit, to dispose of them; and he did. He returned to his home with one hundred and forty dollars in his pocket and determination enough to take him around the globe.

On July 1, 1844, at the age of nineteen, he sailed from New York for Liverpool. Before embarking, however, he asked Mr. Greeley for the position of European correspondent for the *Tribune*, but in vain. Mr. Greeley replied, "I am sick of descriptive letters, and will have no more of them. But I should like some sketches of German life and society, after you have been there, and know something about it. If the letters are good, you shall be paid for them; but don't write *until you know something*."

Young Taylor paid ten dollars for "*steerage* passage" to Liverpool, putting pride and comfort under his feet, that his one hundred and forty dollars might pay the bills of his European trip. It often happens that perseverance has to become a "steerage" passenger on the way to success. He visited Scotland, spent several weeks in England, travelled through Belgium to Heidelberg, staid in Frankfort through his first winter, visited Leipsig, Dresden, Prague, Vienna and Munich, and then travelled over the Alps, through northern Italy, staying four months in Florence, to Rome. All this on foot! Often he was forced to live on twenty cents per day for weeks on account of his poverty. He returned to London with only thirty cents left. He tried to sell a poem of twelve hundred lines which he had in his knapsack, but no publisher wanted it. Of that time he wrote, "My situation was about as hopeless as it is possible to conceive." But his will defied circumstances, and he rose above them. For two years he lived on two hundred and fifty dollars a year in London, earning every dollar of it with his pen. Then he returned to his native land to find that his letters had made him famous throughout the country, and his fortune was made. He had reaffirmed the adage, "Where there 's a will, there 's a way." The will had found the way.

We need not tell the remainder of the story; the reader knows it. Bayard Taylor's fame as author, poet, editor, statesman and diplomat, is known all over the world. His untimely death in 1879, at fifty-four, when minister to Berlin, was lamented by the learned and great of all countries. His will triumphed over all opposing things but death.

PRIMARY EDUCATION IN NEW ZEALAND.

BY ARTHUR INKERSLEY.

HEAD TEACHERS' SALARIES DEPENDENT ON NUMBERS. — HOW CERTIFICATES ARE AWARDED. — THE ATTORNEY-GENERAL AND PREMIER OF THE COLONY ONCE A SCHOOL-TEACHER. — SOME PRETENTIOUS SUBJECTS TAUGHT.

I.

THE British colony of New Zealand consists of three islands, called the North Island, the South Island, and Stewart's Island. The last-named of these is very small, and seems to be of very little importance, except for its oyster fisheries.

For educational purposes the North and South Islands are divided into eleven districts, some of which coincide in name and extent with the Provincial districts, into which the colony was originally divided, each province having to a large extent, its own form of government.

In the North Island are the districts of Auckland, Taranaki, Wellington and Hawke's Bay.

The chief city of the Auckland district is Auckland, which became the seat of government when the old provinces were abolished, and a central government established.

The chief city of Taranaki is New Plymouth, and of Wellington the city of the same name, which is now the capital of the colony, or the "Empire city," as colonists like to call it. Of the Hawke's Bay district, Napier is the chief town.

In the South Island are the districts of Nelson, the chief town of which bears the same name; Marlborough, chief town, Blenheim (so-called from the most famous victory of the Duke of Marlborough); Westland, chief town, Hokitika; North Canterbury, chief town Christchurch, which boasts that it has the highest and most cultivated society of all the towns of New Zealand; South Canterbury, chief town, Tisnaru, lately made notorious by a remarkable attempt made by a member of "society" there to poison his wife; Otago, chief town, Dunedin, mainly a Scotch settlement, and the second largest city in point of population, Auckland having the largest number of inhabitants; and lastly, the Southland district, the chief town of which is Invercargill.

The large districts of Auckland in the North Island and of Otago in the South Island have each three inspectors of schools, while each of the other districts has one. Over all is an inspector-general of schools, who has his office in Wellington, and who, besides visiting the primary schools, occasionally looks into some of the secondary schools.

All schools for primary education are called Public or State schools, and the education is free, compulsory, and secular. Occasionally religious instruction is given after the regular school hours by some minister of the neighborhood to those children whose parents wish them to receive it, but this forms no part of the state system.

The pupils of every school are divided for purposes of inspection and examination, but not necessarily for purposes of instruction, into the following standard classes: All pupils below class I. are put into the Preparatory class, called class P. Class I. includes all children preparing for Standard 1; Class II., all children preparing for Standard 2., and so on to Class VI. Class VII. includes all pupils who have passed Standard 6. These last do higher work, and usually intend to enter the service of one of the boards of education, and to take up teaching as a profession.

The subjects for each of the standards are as follows: For Standard 1, reading, spelling, writing, arithmetic and drawing. For Standard 2, higher work in the same subjects as Standard 1. For Standard 3, more advanced work in the same four subjects as Standards 1 and 2, with the addition of grammar and composition, and geography. For Standard 4, reading and definition, spelling and dictation, writing, arithmetic, grammar and composition, and drawing. For Standard 5, the same subjects as for Standard 4, but more advanced, and with the addition of a specified amount of geography. For Standard 6, more advanced work in the subjects of Standard 5, with the analysis of sentences, and physical and mathematical geography. These subjects which have been mentioned are the Pass subjects — until a child passes in these, he or she cannot go up to a higher standard. Besides these subjects there are others called Class subjects and additional subjects. The Class subjects for Standard 6 are drawing, English history, and elementary science. The additional subjects are recitation, singing, needlework for girls, drill and extra drawing. Drawing is usually taught by a visiting teacher. Singing is taught by the

regular staff of the school, with occasional visiting lessons by a teacher in the service of the Board.

The affairs of each district are in the hands of the Education Board of the district, and the affairs of each school in the hands of its school committee. Sometimes the teacher does not get on well with his committee, and then he has by no means a bed of roses.

The Education Act of 1877 grants $18 per annum for each child in average daily attendance at the public schools. This is paid monthly to the Boards. The General Assembly appropriates moneys at the rate of two and a half dollars per annum for each child in daily attendance. For the support of scholarships established by boards, thirty-six cents is appropriated by the General Assembly for each child in average daily attendance.

The Minister of Education, who is a member of the Cabinet of the Colony, has the control of other moneys appropriated by the General Assembly for the aid of training-institutions, school buildings, and other purposes.

Under the "Education Reserves Act," lands and property are vested in school commissioners, and the rents and profits arising therefrom go to the support of the State System of Education.

We come next to the consideration of the teachers. There are five classes of certificates awarded to teachers, which are distinguished by the letters A, B, C, D, E. In each class there are five divisions, denoted by the numerals 1, 2, 3, 4, 5. The class *letter* is granted upon attainments in learning as proved by examination; the division numerals are granted upon experience and practical skill in the art of teaching and school management as judged by the inspectors who periodically examine the schools. The highest possible certificate is A 1, denoting graduation at the University of New Zealand in first or second class honors, and the highest practical skill. Only two teachers in the Colony hold this rank. The second rank (A 2, B 1) is held by 27 teachers; the third rank by 81; the fourth rank by 167; and the fifth rank by 252; while below the fifth rank, without certificate, but under license, are (excluding pupil teachers) 1,316 teachers.

It will be seen from what has been said that the relative values of certificates depend in equal degree upon attainments in learning and upon practical skill, a higher numeral counterbalancing a lower letter, and *vice versa*. There are thus nine ranks of teachers, of which A 1 is the highest, and E 5 the lowest, the inter-

mediate ranks being made up of all the possible combinations of these letters and numerals.

Sometimes, however, things seem to get unfairly distributed. For instance, in one school the head teacher receives $700 per annum, and has thrice failed to pass for class E, while his assistant holds a D 2 certificate, and receives only $200 a year.

For class B it is necessary to have passed the examination for the degree or Bachelor of Arts at the New Zealand University, but it is not necessary to have taken honors at the examination.

For C, D, and E, certain examinations must be passed.

The education boards may select for use in their own districts any of the books, or series of books, described in an official list.

For the instruction of teachers, there are training-colleges in each of the large towns, and headmasters are required to instruct the probationers and pupil-teachers attached to their school in the art of teaching. At Auckland the training college adjoins the largest city school, containing about one thousand boys and girls, so that the pupil-teachers who attend the college can have actual practice in class-work under guidance. The principal of the training college is one of the ablest clergymen in the city, and receives a salary of $2,500 a year, while the vice-principal, who is also head teacher of the adjoining school, receives the same salary. Salaries are based upon school attendance. There are perhaps three or four head teachers in the Auckland district receiving salaries exceeding $2,000 a year.

The scale of payment for head teachers is as follows:—

Average Attendance.	Male.	Female.	
200	$1,200	$ 960	per annum.
300	1,375	1,100	"
400	1,575	1,260	"
500	1,725	1,380	"
Extra for every 10 above 500,	15	12	
800	2,170	1,740	"
Extra for every 10 above 800,	10	8	

Male certificated assistants receive from $400 to $1,250 per annum. Female certificated teachers from $300 to $750 per annum.

Sewing-teachers are provided, and in the case of females, weight is given to proficiency in needle-work.

Sometimes a man holding quite a low rank of certificate may

receive a large salary, because the district in which his school is has increased largely in population, and his salary with it.

In New Zealand, as in this country, the number of females employed as teachers by the various Boards, far exceeds the number of males.

Certificates are awarded to teachers on forwarding their credentials of academic standing and teaching ability to the Minister of Education. The Hon. Sir Robert Stout, R. C. M. G., till recently the Minister of Education, Attorney-General and Premier of the Colony, was educated at a parish school in Scotland, and was, for a time, a teacher in a State school in New Zealand. He then became a lawyer, and rose to the highest office in the Colony.

The cost of Primary Education in New Zealand is very great, and many people are to be found who loudly exclaim that it must be largely reduced. Against any such reduction of the Education Vote the Premier has always spoken very strongly, and the reduction, if any, should be made in the still costlier arrangements made by the Colony for secondary and higher education.

School-teachers have as their organ a paper published monthly at Christchurch, in the South Island, called the "New Zealand School-master." It consists of sixteen pages, and contains articles on various educational matters, notes on new books, examination papers, and reports of the proceedings of the Educational Institute.

Drill is taught in the schools, and all teachers, who are not qualified, are required to qualify as soon as possible in singing, drawing and drill. Drill is given daily in company movements, and on one afternoon in the week, exercises with Indian clubs and wands are taught.

School-work usually begins at 9.30 a. m., and goes on, with an interval for recreation, until 12.30 p. m.; begins again at 2 p. m. and goes on till 4 p. m.; but teachers are required to sign their names in the attendance book at least twenty minutes before the beginning of morning and afternoon school. The children are marshalled in the play-ground about fifteen minutes before school begins and march into school in single file, hanging up their hats as they pass down the hall. The girls are marshalled separately, and sit together and separate from the boys, though they are members of the same classes and are taught by the same teachers. They take their seats by word of command, roll is called, and

exercise-books collected. All is then ready for beginning the appointed lesson at 9.30 or at 2.

The large city schools usually have attached to them a considerable number of probationary teachers and pupil teachers. The former are persons who have not been trained as teachers, but are accepted by the Board and paid a small salary while they acquire actual practice in school-work. They receive from $150 to $300 a year. When a probationer comes to a school he is attached to one of the teachers in charge of a class, whom he assists by correcting the exercise books containing the home-work of the children, and by occasionally taking lessons. He also helps to keep order during drill, and is sometimes employed by the head teacher to administer punishment to refractory or disorderly boys. The punishment rarely, if ever, exceeds a few strokes on the hand with a cane. Probationers are occasionally sent to look at the work of other classes than the one to which they are attached, that they may get an idea of the whole work of a school.

Though school-work is nominally over at four o'clock in the afternoon, teachers rarely find themselves able to leave the school for some time after this hour, for they have to stay in while idle and troublesome children finish the work which they have not done during the appointed time, or do extra work set as a punishment. They have also to devote a considerable time in the evenings to the preparation of their next day's lessons, for each lesson is expected to be given in an orderly, well-considered manner, and to cover a definite portion of the subject on which it is given.

FEMALE EDUCATION.

BY RUTH WARD KAHN.

THAT a theme is hackneyed and time-worn constitutes no argument against its respectability — all themes are so in fact — but on the contrary, its very antiquity entitles the subject to a certain degree of veneration and patient thought. I am not about to enter the arena of moral discussion and turn Nemesis in my denunciations against, nor an easy tyro in sustaining any species of small talk, considered merely as such; but desire simply to glance at female education, a subject that stands, perhaps, more prominently before the public in our country at the present time than any other.

In more than one treatise on the education of women, I have seen it laid down that its end and object should be to fit them for the duties of maternity. They are to be taught and trained to the end that they may be able to teach and train their children. If this theory is to be admitted, at least there should be no offence to the theorists in a faint smile at the inadequacy of the means to the end, under modern systems. Shallow, superficial, rapid as modern female education too often is, it is not quite fair to assume that the rising generation stands to it in the exact relation of fruit to tree. And notwithstanding familiar instances of great men, whose character, ability and genius have been directly traceable to maternal character and influence — notwithstanding Napoleon's dictum "that the fate of the child is always the work of the mother," and the corroboration of it in the case of John Wesley, the Napier family, and many others — much remains to be said for the other side of the question, and examples, such as the second Pitt and the second Peel, may be urged to show that not seldom it is from the male parent that ability, energy and intellect descend to the offspring.

Without at all undervaluing that benignest influence, to have lost or never to have known which is one of the sorest earthly privations, the softening, winning, humanizing influence of a mother, it is an incomplete and narrow view of education to limit it to training woman for a destiny that may never be hers. Rather should that system recommend itself which purports to educate for the wider object of producing "the perfect woman nobly planned," who shall be equal to the occasion, whether it be to bring up children, to be a companion to her husband, whose home it is denied her to bless with offspring, or perchance, to illustrate in single blessedness the sunny "afternoon of unmarried life."

The primary and divine idea of woman is "a helpmeet for man," and if so, in educating her for her vocation, respect must be had, not less to such provisions as may fit her to exercise her proper influence as a wife over her husband, or as an unmarried woman over society, than to such as may make her a model mother to her boys and girls. In each sphere, if she realizes her mission, she has it in her power to be "vainqueur des vainqueurs de la terre"; the more cultivated her mind and heart, the more complete her spell whatever be the state of life she occupies

under the allotments of Providence. The childless wife, if highly educated has the greater power to solace her husband's regret at lack of offspring by being all in all to him herself; the maiden lady, whose youthful training has ministered to her the essentials for becoming if need be, agreeable company to herself, is the more likely to be welcomed in society, because she brings to it the grace of contentment with her lot, and the power and will to contribute to it additional ornament and brightness. It is the lack of sound early education and intelligent preparation for life which makes the dissatisfied old maid, no less than the silly wife, and the weak incompetent mother. The whole subject, then, has a wide interest for every thinking woman.

On the first point of consideration, the time over which female education should extend, I have little fear of being at issue with those most capable of dispassionate judgment, although I may perchance do despite to the views of modern young ladies, and contravene the principles of worldly-wise mammas. In regard to early training all are more or less agreed. A good mother begins teaching her child months before it is born, and happy is that child whose education goes on the longest; next to it where the directions, if not the detail, are under the mother's eye. As to rudimentary teaching no one doubts the wisdom of beginning to impart it early, and in gradual, moderate draughts.

It is when the rudiments are mastered, and the girl is in her teens, that difference of opinion arises touching the hours and years of female instruction. Here, if one may judge by common practice, the verdict of mothers and daughters is as much at variance with that of disinterested lookers-on, as universal suffrage differs from the decision of a select committee. While lookers-on are wont to deem that the meet preparation for cultivated womanhood is gradual unforced acquisition of such knowledge, graces, and endowments, as will sit easily, cling lastingly, and minister the most unfailing resources to the future life, it seems as if those most nearly concerned had come to the conclusion that the main object is to crowd so much of music, languages, sciences, graces, and accomplishments into the years between twelve and seventeen, that at the latter limit a girl may be pronounced "out"; may look to her part in the grown-up world, and be at leisure to view the world and its workings, before her younger sisters arrive at the margin of this immature Rubicon. Let female educators

recognize that the stimulus of emulation is wholesome and desirable; and that it is well to let the girl understand that her education is in her own hands, instead of in her teacher's, and the fruits will be visible in higher aims, less frivolous tastes, more definiteness of purpose and greater strength of character. Such common sense training is the course by which to earn the high and discriminating praise which DeQuincey awards Miss Wordsworth: "She was content to be ignorant of many things; but what she knew and had really mastered, lay where it could not be disturbed — in the temple of her fervid heart."

Enough has been said to indicate strong dissent from the foolish system of making school-girls slaves to the acquisition of accomplishments for which they have no taste; and there is a natural transition to the questions *what* and *how* to teach, in negative as well as positive aspects. And here a division meets us which it is less than ever possible to ignore in the present day, that is to say, education of accomplishments, and education of moral powers. Most people rank these in the order in which I have placed them, though sounder wisdom would deem that which we have set first, the education which aims at achievements in society, as very secondary to that which cultivates mental and moral power. The one has an eye to externals; the other is introspective. And while the former secures at too great a sacrifice of time and pains, considering what must be foregone to make room for it, the more transient power of attracting and captivating, the latter furnishes the far more precious life endowment, the independence and self-containedness which enables her who has it to be happy, good, and useful, out of society as in it. Let the education, then, of accomplishments be relegated to the second rank, and disposed of briefly, before we treat of essentials.

No one would lay down a rule that should ban the cultivation of vocal and instrumental music, seeing that it exercises, when successfully developed, so just a spell over so many hearers, and such soothing, awakening, spiritualizing influences upon even those who are wholly ignorant of its principles. How quickly, too, evil takes its departure when a sweet melody and a holy song quickens into life! But it may admit of grave question what is gained by two hours and a half of practice per diem in the case of ninety and nine girls who will never become first rate performers, and who will unquestionably play no more after their school-

life is over. It is quite time that in female education there should be a wider recognition of the wisdom of electing what accomplishments to pursue, and what to decline.

In like manner we venture to think it is a mistake, unless in cases of rare linguistic talent, to encourage the acquirement in mere school days of more than one modern language. "Non multa sed multem" may hold good in this case, if interpreted for the nonce of getting a thorough knowledge of one or two languages instead of a smattering of many. Perhaps even where there *is* a talent for languages the complete mastery of one is a greater power than divided acquaintance with half a dozen; and, as French is a passport to Europe, and serves as a medium of intercommunication to the civilized world, it deserves to be more really and effectually taught to every American school-girl, than it is likely to be, so long as, beyond a few verbs and a few exercises, it is left to teach itself through the broken gabble wherewith girls cheat the hours during which a veto is put upon their mother tongue. A wise selection of French books would enhance the value of the study. Better and more attractive vehicles may be found for conveying the knowledge of the French language to American youth than "Gil Blas" and "Recueile Choisis" the "Te 'le 'maque," and "Gonslave" of our school-days. This done, and care being taken to teach it thoroughly and grammatically, the study of French may serve to the female mind as a substitute for that mental drill which the dead languages supply to the American school-boy. It will furnish the mastery over grammar and syntax, and a key to self-instruction in other languages, if such should chance to be the taste. Not indeed the master key, for that alone is Latin, though at various times objections — groundless objections — have been urged to its introduction into the female curriculum.

Weighty indeed, ought such objections to be, if they avail to exclude a girl from a discipline so promotive of accuracy, so improving to English style, so helpful to familiarity with the grammar and syntax of most European tongues. It has been urged that the Latin language is more dangerous than the ordinary type of French novels, for they teem with subtiler, because less intense poison. Those who turn in disgust from Homer ought to realize that as regards matters of delicacy, we have occasion to apologize a hundred times for Shakespeare for once that

an apology is needed for Homer. And what would be the ratio if for Shakespeare we read Beaumont and Fletcher? The worst blemishes of the Elizabethan dramatists are not half as liable to sap the foundation of simplicity and purity, as the equivocal situations and maudlin sentimentalities of the modern sensational novel. The chance and scattered evil that may lie here and there in a powerful book never does any harm to a noble girl; nor can we exclude Latin from the studies of girlhood without ignoring another sound position of the leading educators, namely, that a woman should know any science or language she learns thoroughly. But the true answer to objectors is, to concede the peril of unguarded and unrestrained reading of the classics — as indeed, of *all* unrestricted reading in the case of the young — while we uphold the importance, toward strengthening the female mind, and completing its education, of such a discriminating study of Latin and Greek as is imparted by conscientious instructors, best of all, if it may be, under parental surveillance or tuition. There can be no healthier discipline conceivable for the female mind than instruction by examples in a well chosen course of biography. And, not so much needed for its disciplinary effects as for its essential claim to form a part in the training of educated American women, and its legitimate stimulus to patriotic feeling, the kindred study of English literature is entitled to far more attention. Why should not American girlhood be taught, first and foremost, its own mother tongue — so as to love it, to read it, to write it; to be conversant with its poetry; to appreciate its prose; to know something of its structure, and history, and development? One knows not whether to smile or blush, in this age of books and literary luxury, to see how ignorant of our standard literature are three-fourths of the young ladies one meets. Without expecting them to be able to pass an examination in Shakespeare or "Paradise Lost," or to be thoroughly at home in the "British Essayists," one ought to find it a harder task than it is to fathom the depths of their knowledge of English literature, especially if their skill in making talk out of small data is taken into account. The fault does not lie with the young ladies themselves, it lies with the misdirection of taste in school-days; and lack of knowledge so valuable and so accessible is surely an inexcusable fault. If lessons upon such subjects could be required the gain of the process would be twofold. The memory would be

strengthened, and this is no unimportant aim in education; and besides this, a style would be formed which would have its foundation in accredited models and accurate principles, and yet retain a certain character of its own, peculiar to the writer. We might again, then, look for the lively, easy, graceful letters, which women penned before we reached the hurry of modern life; that which the preference for showy accomplishments, and the skimming of light books has done so much to banish. What is there now to equal the natural, unsystematic, but delightfully versatile correspondence of some women whose education has been modeled by a wise hand? Or what more barren than the hasty scrawls, the ungainly sentences and phonetic spelling of many young ladies, on whose education there has been no stint of expense?

It were wrong to let Mr. Ruskin's "veto" upon theology as a science for women lack my hearty endorsement. There is no need to teach them wider charities, or more trustful and affected piety. These in true women are innate. And if one thing rather than another is calculated to mar and outroot these, it is surely the intrusion of themselves into the religious controversy, "into that science in which the greatest men have trembled and the wisest erred."

HOW TO STUDY.

BY PROF. A. REICHENBACH, COLLEGEVILLE, PA.

IN entering upon the discussion of this subject, I should perhaps define study as the student desires to use the term. In this sense study is an exercise of the mind, which systematically develops its faculties and stores it with knowledge.

According to the definition given, study must be performed by one's own mind and is a necessity for the development of its faculties. In order to exercise the mind, we must apply it to that which may be known by study; hence the mind also acquires knowledge in the process of its culture and development.

Good teaching disciplines the mind and makes clear much which was not well understood before, but never takes the place of study. It assumes that the teaching should be correct and systematic. The undisputed scholarship of some self-educated men with ordinary mental endowments, proves the assertion that

thorough, systematic study without instruction is worth far more than instruction without study. If a lesson be well studied, the recitation will be acceptable, and the instruction which follows is received more attentively and more easily becomes one's own. The gifted student may wofully deceive himself in this matter. Careless study and fair recitations, with corresponding marks and a piece of parchment, will finally leave him far behind the dull, studious boy, in life's competitive battling for success.

Study thus assumes an importance which cannot be easily overrated. The definition already given also involves the purpose of study: its object is the successful performance of life's duties; its end is obedience to the divine will.

Further inquiry into the nature of our subject brings to light an adjustment of relations, which constitutes the laws of study; and an orderly manner of studying according to these laws, which constitutes the methods of study. We thus obtain the two leading divisions of our subject. As the first division is theoretical, it must yield much space to the second division, which develops the fundamental ideas underlying the words, "How to Study."

The mind must study something. Here we have a subject studying and an object studied, and each under fixed regulations. Hence we have subjective laws of study, or those derived from the human constitution; and objective laws of study, or those derived from the nature of the studies pursued. The subjective laws may be divided into two classes, namely, those which relate to the nature of the mental faculties, and those which regulate their practical application to study and the relation of the body to mental activity. The former class belong more properly to mental science and logic; but the latter fall entirely within the limits of our subject. These may be subdivided into laws of self-activity and the law of rest.

As to application to study, self-activity is governed by four laws; the laws of arrangement, concentration, investigation, using the word in a limited sense, and continuance.

The law of arrangement requires that difficult lessons be studied at the time of day when mind and body are most vigorous, and the easy lessons when the student becomes tired; also, that the succession of lessons be such as will call forth a change of mental activity from one lesson to another.

The law of concentration requires, that the body be in good

health, the stomach not oppressed with food, and the mind sound and free from trouble or frivolity, and that the will instantly control the desires and set the intellect to work at the moment the studying is to begin.

The law of investigation requires that the nature of the subject-matter be sought as suggested by the objective laws of study enumerated further on; and, that the discriminative power of the intellect act keenly, as the mainspring of correct analysis and as more or less fundamental to synthesis, comparison and contrast, induction and deduction, generalization and classification. The work of assimilation begun by these processes is completed by repetition and retention. Recollection and reproduction by association and suggestion give the result of the investigation made. This law aims at systematic discipline of the mental powers, and, through this, at the acquisition of a vast amount of knowledge.

The law of continuance requires that the student persevere in study to the end in view, and that ample time be allowed for studying the lessons of the day and for completing the course of study begun. These requirements are conditioned on the age, capacity, health, and pecuniary circumstances of the student. This law is hostile to short courses of study and hot-bed schools of learning.

The law of rest stops all activity in study. It checks blind obedience to the law of continuance. Its chief condition is periodicity, brought about by alternating study with rest, and its object is recuperation. It requires cessation from study, at such times and during such intervals as will enable the body to recruit its strength and the mind to regain its clearness and vigor.

The objective laws of study are the following: 1. The law relating to material objects as such. 2. The law relating to qualities. 3. The law relating to actions or events. 4. The law relating to conditions. 5. The law governing the study of relations. 6. The law governing the study of spiritual substance, as such, through its attributes.

The law relating to the study of material objects requires that an object be viewed as a whole before pointing out its attributes as such; then, that visible objects be distinguished from one another before learning their names and definitions; and, lastly, that imaginary and spiritual objects be studied after material objects.

The law relating to qualities requires first, that qualities directly knowable by perception be studied in the order of the power of the senses to make impressions upon the mind, and that each quality be singled out by analysis, or comparison and contrast, and then all qualities be united by synthesis; and that attributes not directly knowable by perception be studied gradually, as the power of abstraction develops. According to the first requirement of this law, we should first see a mirror, hear a bugle, feel velvet, smell perfume, and taste honey. In each case the first impression made upon the mind also marks a characteristic quality of the object.

The law relating to actions or events requires that each one be carefully traced by analysis, that their order and connection be wrought out by comparison and synthesis; and that the series be critically reviewed for retention and reproduction.

The law relating to conditions, states, and hypotheses requires that physical conditions and states be studied before the spiritual, that logical conditions be connected with their corresponding conclusions, and, that hypotheses be used only where there are sufficient data for argument, demonstration, or for setting up a theory.

The law governing the study of relations requires that similarity and dissimilarity, superiority and inferiority, in objects, ideas, and thoughts be studied by comparison and contrast; that coördination and subordination be traced and practiced in generalization and classification; and that cause and effect be studied by induction and deduction.

The law governing the study of spiritual substance requires that it be last in the order of study, and that all the student's power of abstraction and reflection be brought to bear upon its attributes and relations.

The adaptation of studies to the age and capacity of the learner may be laid down as one of the most important prerequisites to correct methods of study. Unfortunately, many young learners are allowed to judge for themselves, in this important matter. They succeed about as well as children who cultivate plants by sowing seed upon the play-ground. How can an undeveloped mind plan a better course of study for itself than those which have been prepared by the ripest scholars and have stood the tests of ages? The learner should, therefore, place himself in the

hands of competent teachers. There he can pursue a course of study, which will be safe to follow.

Having passed the entrance examination, he should make out a schedule for study and recitations, before he is ready to begin to study. Here is the next important prerequisite; for the question arises, When and how should each lesson be studied so as to prepare it well, without overwork? The faithful but inexperienced student is in danger of overtaxing his mind and losing his health by hard study at times when he should not study at all. Overwork and under-rest, on the one hand, and under-work and over-rest, on the other, have stamped future failure upon the first scholastic year, in many a student's life. There is a limit to the strain to be borne by the nervous system, just as there are limits of time within which no lesson can be mastered. Young learners are apt to go to either extreme unless the time for study be fixed and written upon a schedule and then judiciously followed.

To make a good schedule for study is sometimes a very difficult task. It may not always be possible to recite lessons at such times as would harmonize with the best arrangement for study. The distance of one's home from school, as well as the amount of one's work at home, may also interfere with the proper time for study. If these obstacles cannot be removed, the good student arranges his studies accordingly, and takes care that no act of his stands in the way of arranging his time for study, as laid down in his schedule.

The law of arrangement is best carried out by most students, if they place the difficult lessons for study in the morning hours. Lessons in which the memory is exercised most should be studied before breakfast, care being taken not to study too long before taking food. Lessons in which prolonged reasoning is required are usually most easily mastered some time after breakfast. Some easy lessons may alternate with the difficult, and others may be studied just before dinner, or before retiring. The law of rest forbids study immediately after meals, on the ground that the blood needed to begin digestion should not be diverted from the digestive organs to the brain. Such double activity is particularly injurious after supper. Twenty minutes of rest after breakfast, an hour after dinner, and an hour and a half after supper, may be regarded as a good average for rest after meals, provided the student does not eat improper food, nor eat too much, nor eat between meals.

A good student will avoid studying a lesson just before reciting it, particularly if the studying be chiefly the work of the memory. He who cannot remember a lesson six hours must become still more forgetful by studying lessons immediately before reciting them. The memory should have time to be tested; and if the tests be properly made the memory will become more and more retentive. The true student does not study to recite merely, but to develop his mind and store it with knowledge for future use.

The arrangement of studies is also dependent upon the time for sleep. The average time for sleep is eight hours. Those who are physically weak and study hard are perhaps the only ones who should form the habit of exceeding this average. Seven hours ought to be the limit for all lazy boys. Some of these sleep at such a time as would lead one to believe that they might have descended from the owl.

The periods for recitations, meals, and rest, along with the proper order of studies, have enabled the student to locate the periods for studying his lessons, upon his schedule. How long each study-period should be, the young learner may not be able to determine without trial. The teacher may err in assigning lessons; they may be too long, and the law of continuance will come in conflict with recitations. Every case of this kind should be reported to the teacher without delay, so that the error may be corrected. Beginners should make trial schedules and copy them after all corrections have been made. The periods for recitations may be written upon one sheet and the periods for studying lessons upon another; but both can easily be written upon the same sheet, if the names of the days appear as headings of vertical columns and the periods or time-table appear at the left side. Provision can thus be made for exhibiting to the eye all the time for each day, both for study and recitations. The best way to distinguish study-periods from recitation-periods is to fill the spaces for the former with words written in red ink, and the spaces for the latter with words written in black ink.

With a corrected schedule in hand the beginner is ready to prepare good lessons regularly, so far as a schedule can be of service to him. It now remains for him to follow it faithfully in order to make it really valuable. Unless he does this, his time will probably be wasted and his money or some one else's lost.

The student should know why two students of the same intel-

lectual capacity and apparently alike in diligence differ so widely in the preparation of their lessons. Men usually say that the one studied harder than the other, and the young student accepts the statement without further reflection. At this point, therefore, a partial analysis of the processes of mental activity is in order.

The law of concentration leads him to give undivided attention to his lesson. All the attractions surrounding him do not move him. His whole mind is fixed upon the subject before him and lays hold of it, according to the law of investigation, with an iron grasp. The senses act with indescribable keenness. By clear discrimination and careful analysis the character and divisions of the subject, and the method of studying it are soon discovered.

Thus the student prepares himself to master his subject. Without this preparatory work, he may study hard and worry long, but he will not become master of the situation.

If a lesson presents objects, qualities, actions, places, events, conditions, relations, or several of these, the student proceeds mainly by analysis, induction, comparison and contrast, or by several or all of these taken together, according to the elements contained in the lesson. By analysis we trace the objects, qualities, and places in geography. By induction we discover the general law governing a class of words in an exercise in grammar. By comparison and contrast we learn much about the conditions and relations in the problems of mathematics.

If a lesson present names, divisions, leading thoughts, principles, and definitions, or several of these, the student investigates them chiefly by analysis and synthesis, generalization and classification, induction or deduction. By analysis we distinguish the letters of a new word, and by synthesis we unite its elementary sounds in pronunciation. By analysis, also, we discover the divisions and the leading thoughts of a subject, and by synthesis we combine them all in an essay or an oration. By generalization we find names for classes of words and for kinds of external objects. By classification are worked out most of the long outlines in botany or zoölogy. By induction we may discover some of the principles underlying our investigations in the elements of physics. By deduction we apply the principles and definitions of logic or mental science to the discussion of particular topics belonging to these sciences.

In addition to these and similar modes of mental activity, there

must be clear apprehension of what is studied; otherwise full comprehension is impossible. Processes and exercises must be thoroughly worked out, not only for the knowledge and mental development gained thereby, but also for the skill which the mind thus acquires in mastering difficult problems.

The law of continuance is applied to the principal parts of a given lesson first, and to the details afterwards. No thought of anything foreign to the lesson is allowed to break the continuity in study, until the whole lesson or a division of it be mastered.

The student who thus studies is exceedingly unpopular among time-killing babblers. But he does not forget the requirements of the law of rest, according to his schedule. When an unusually difficult task requires much extra time, the student breaks the strain after close application of two to three hours, in order to avoid harmful fatigue at the end of the day. A short interval for rest will forestall exhaustion and enable him to regain some of the mental vigor required to complete his task well. A review by thorough repetition prepares the memory for perfect retention. Then only can association and suggestion bring the best results in recollection and reproduction before the teacher.

The student is now ready for the study of the next lesson upon the schedule. Only under unavoidable circumstances will he vary the order of studies. But when the time for rest comes, he is just as firm and determined to avoid all application of the mind to study, even though a part of a lesson be not learned before the time for reciting it has arrived. In this way only, can the teacher measure the power of a new class, in the shortest time, and assign lessons of proper length. The violation of the law of rest, together with other dissipations, has brought many a student's career to an untimely end.

From these considerations, it will be seen that, other things being equal, a student will be successful or unsuccessful in study, in proportion to the method he follows in applying the laws of study. It requires much wisdom and unusual will power to obey the laws of investigation, of continuance, and of rest, so as not to violate any one of them. Beginners are likely to find it difficult to apply the law of concentration. Indeed, some of them never become students, in the true sense, because they are unable to *fix* their minds upon the lesson before them. Others lack discriminative power and never go below the surface of any lesson, and can-

not even concentrate their thoughts upon it, longer than a few minutes at a time. Those who are thus troubled should make critical analyses of short and easy topics their sheet-anchors, to hold them down to their work; otherwise there is scarcely any hope of their carrying out the laws of investigation and continuance. Such students should also guard against studying books by the page instead of mastering subjects.

From methods of study in general we pass to particular methods for studying branches having certain peculiarities; but want of space forbids giving more than a few practical hints.

In orthography and in elementary reading, the beginner should look at every letter in a word as sharply as the printer looks at his proof-sheet to discover errors or defective type. As long as a boy mistakes one letter for another, or omits or transfers a letter, he can derive but little benefit from the drill in the class-room.

In history, subordinate events must be made to cluster around the principal events to which they belong, and the principal events should form the divisions of a chapter or period. Having thus outlined the subject, the learner is ready to fix the outline in his mind and to fill it out by frequent and careful repetition.

In the physical sciences the facts and phenomena are related more or less by coördination or subordination. This relation can best be exhibited to the eye for the purpose of study, in the form of outlines. Therefore, the student should study them by making outlines. In the same manner, some time may be saved in studying the causes and the laws, after the facts and phenomena have been learned.

Nearly all study in mathematics below higher arithmetic should be inductive; nearly all above it should be deductive. At first the student proceeds from processes to principles; afterwards he proceeds from definitions and axioms down to the solution of problems or the demonstration of theorems.

The arts require the careful training of the eye and the hand, as well as the exercise of judgment and taste. The imagination also plays an active part and requires development in one student and restraint in another.

In the languages, grammatical forms must be mastered first. Uncertainty here simply means failure further on. In a modern language there should be much practice of speaking according to a

model, and further on in the course the peculiarities of construction should be verified by the laws of grammar. In the ancient languages the style of a new author must be compared with that of the last one read. A list of the new words may be made, and their meanings should be closely studied. As much as possible should be learned about the life and spirit of an author, from his writings and from other sources. In no foreign language should translations into such language ever be neglected, under any pretext whatever. The thorough study and practice of Latin, Greek, German, or French composition puts the true student into actual possession of a powerful engine with which he can outride a thousand times his duty-shirking competitors. Original productions in one's own language should be the result of long continued study of the subject-matter, followed by a logical outline under a suitable process of invention. Then the correct application of rhetorical style completes the production.

The abstruseness of the study of the laws of thought as exhibited in logic, and of the functions and relations of the faculties of the mind as laid down in psychology, places these studies at the top of the scale of things human. When the mind turns in upon its own operations, it has to do with that which will outlive the things of time and space; and therefore it encounters new difficulties in study. Abstract thought now largely takes the place of concrete thought. All the power thus far gained in mental development and much of the knowledge acquired must now be used in the study of mind. If the study of man, whose power is limited, be difficult, much more must be the study of God, whose power is unlimited. Theology, therefore, reaches beyond human knowledge. Here a new element must be added, namely, faith. Where knowledge ends, faith begins and reaches out into eternity.

In laying down general laws of study and tracing their application in methods of study, we have not established a "royal road" to learning; for knowledge is gained by hard work along the way and is not to be won at the end of an easy race. The student is to construct a grand highway by his own efforts. In this plan we have only surveyed the route; he must build the road himself. He will also mark out numerous by-ways, leading through valleys of pleasure and over hills of learning, back to the grand highway, from which the view becomes more delightful, at every step and in all directions, because he is building heavenward.

HORACE MANN.

BY FRANK H. KASSON.

THE name of Horace Mann is cherished with veneration and loving respect by the teaching fraternity of our land. It is a pity that to many of the present generation so potent a name is now merely a name, and not a warm, vital personality. We therefore hail with deep satisfaction the appearance of a new and fitting monument to this great educator in the shape of five substantial volumes, dealing *in extenso* with his *Life and Works*. Not that we expect that great numbers of teachers will purchase these volumes, — though the leaders of the educational thought of our time will undoubtedly do so and every good library should possess them, — but the reading of these volumes will be within the reach of most and many articles will celebrate anew his masterly upbuilding and defense of our common school system and introduction of normal schools.

We could wish that the power of condensation had not been so lacking in the loving, eulogistic biography of the devoted wife of his mature years. And much of his own published work would be improved by judicious condensation. But the record of his life is that of a great thinker and an heroic and indefatigable worker for the mental and moral well-being of the youth of America. His mind was pure and lofty and far ahead of his time; his devotion to the cause of learning and self-abnegation in his work was such as became rather an angel of light than a creature of earthly mold. Does this seem fulsome praise? Then go back half a century. Create his environment. Live with him; see what obstacles beset his path from apathy or party spite, or the fierce rancor of theological bigots. See him animated by one lofty purpose, to lift the schools of Massachusetts, and so of the country, to a plane they had never reached before, and to place over these schools, teachers fully qualified to carry out these higher ideals. See him giving himself a daily, living sacrifice to accomplish this end; giving time, giving money, giving voice and

pen, and hours of needed rest, and even life itself to the cause of education.

Horace Mann was a hero. He set a herculean task before himself and did it. He gave his life to the youth of America and we are all his debtors. The work which he did is imperishable. He lifted a nation upon his Atlantean shoulders and broke open the locked doors to hidden stores of wisdom. He built "monuments more enduring than brass" in uncounted thousands of young lives. He did for America what Froebel and Pestalozzi earlier did for western Europe. But Horace Mann was no saint, though he did a saintly work. His nature was delicately attuned and the sharp raspings of the world often struck out anything but heavenly melody.

Those who could not understand, bitterly opposed him, and received from him many a sturdy blow, which they doubtless well deserved. The air about him was all hot with theological and political strife. We who have fallen on gentler times can scarcely credit or understand the bitter jealousies and savage personalities of those ante-bellum days. Horace Mann was a Liberal in religious views and a bold aggressive reformer, as such he was a conspicuous target for conservative, narrow-minded and illiberal men. If in this strife he stood like a rock defending the truth as he saw it, is it strange if his speech was at times acidulous, and if he sometimes did scant justice to the good men who opposed his views? Let a man be judged by his time and environment. Horace Mann will bear that test. Very early in life his mind had suffered under the stern teachings of that great theologian and pitiless preacher, Doctor Emmons, of whom it is said that his mind was so keen that it could balance itself on a razor's edge for half an hour.

Horace Mann first saw the light in Franklin, Massachusetts, on May 4th, 1796. Doctor Emmons was then in the height of his pulpit glory, being fifty-one years of age, but with forty-four years of life yet before him. Being a sensitive child, the terrible portrayals of Divine vengeance to which he listened roused the antagonism of Horace's nature and tended to make him morbid. The family was poor, and the boy was early taught lessons of stern self-reliance. As a child he earned his school books by braiding straw. He was nearly twenty when the opportunity came to fit for college. So eager was he that in six months from the time of begin-

ning his Latin grammar he entered the sophomore class of Brown University — in September, 1816. But the high pressure which fitted him so rapidly for college life enfeebled his system and made all his after life a battle with disease.

In college, young Mann conducted himself with great decorum, and soon worked his way to the head of his class. He was a fine writer, and excelled both in the classics and in the exact sciences. Everyone saw in him a student of great promise. Graduating in 1819, he was very soon elected college tutor in Greek and Latin. The next two years enabled him carefully to review and increase his knowledge of the classics. In 1821 he entered Judge Gould's law school at Litchfield, Conn. Within a year he became recognized, by general consent, as the best wit, scholar and lawyer among the thirty students there. He is described at this time as possessing a "massive brow, high arching head, mild bright eye and eloquent mouth." No wonder his comrades saw in Horace Mann a coming great man, for he was not only gifted, but was working *eighteen hours a day.*

Beginning his legal career in Dedham, he delivered an oration on the Fourth of July, 1824, which elicited the hearty praise of John Quincy Adams. In 1827 he was elected to the Massachusetts House of Representatives, and began ten years of active political life with a speech in defense of religious liberty. As a lawyer, Mr. Mann had remarkable success at the bar, due to the fact that he would never uphold what he believed to be the wrong side. He was not popular with rogues, but good men trusted and honored him. About this time he married an angelic creature, the young daughter of President Messer of Brown University. But after two years of delightful wedded bliss the joy of his life ended in her untimely death. This was a terrible blow to him and his reason almost gave way. The brilliant, original, *radiant* man died in him. Ever after, Horace Mann lived a serious life, in the presence of death and the hereafter.

More than ten years of arduous public, but dreary private life lay between the loss of his child-wife and his second marriage, in 1843. She had shed a light upon his path "brighter than any light of the sun." And for him she had "a voice sweeter than any of Nature's harmonies." That sweet voice being silent, and that lovely presence forever gone, he turned as soon as he could recover from his numbing sorrow to devote his life to the welfare

of those who most needed his services. He became a worthy co-laborer with Doctor Channing, "Father Taylor," and Dr. S. G. Howe. His nobleness of character drew to him as with hooks of steel such men as Robert Waterston, Samuel Downer, Doctor Woodward, the genial Doctor Todd of Hartford, and the philosopher Combe. During this period Horace Mann secured the passage of the act which resulted in the Worcester hospital for the insane. He was also an earnest worker in the cause of temperance.

After some years of noble service for the poor, the ignorant, and the suffering, as well as guarding all the interests of the state in the House, he passed into the Senate. Here he stood forth as one of the purest, most self-sacrificing and indefatigable of statesmen. In 1837 he was president of that body. This was an honorable station, but one of really higher and more lasting honor awaited him.

Turning his back upon the bright prospects which lay before the president of the Senate as to wealth, social distinction and political preferment, Horace Mann gave himself heart and soul to his new duties. Henceforth he was to be known as an educator — the greatest educator of his generation, shall we not say of this century? A childless widower, he heard the cry of little children and came to their relief. Few knew what lay before him when he accepted the office of secretary of the State Board of Education. He was treading an unknown way. But his resolute soul never faltered. His keen vision smote the mists of prejudice, ignorance, sloth, misapprehension, and all the way grew luminous before his swiftly advancing steps. The result of his first year's work is embodied in an annual report which he laid before the School Board early in 1838. It bears abundant evidence of his unflagging zeal and devotion to the cause of education.

His specific duties as secretary of that Board were "to collect information of the actual condition and efficiency of the common schools and other means of popular education; and to diffuse as widely as possible, throughout every part of the Commonwealth, information of the most approved and successful methods of arranging the studies and conducting the education of the young." How faithfully he did the work entrusted to him the republication of his twelve annual reports after half a century

of time bears eloquent witness. The Board held its first meeting in the Council Chamber at Boston, on June 29, 1837. A noble body of men composed this Board. Such names as Edward Everett, Robert Rantoul and Jared Sparks sound familiar. They at once proceeded to elect Hon. Horace Mann as their secretary, at a salary of $1,000. He threw himself immediately into the work, and in a few weeks was lecturing on education, holding conventions, and gathering information from every part of the state. On the fifteenth of November, he was able to say that he had "met conventions of the friends of education in every county in the state, except Suffolk." And that "with the exception of two counties, these conventions were very fully attended, almost all the towns in the respective counties being represented." He had fully determined that all the children in Massachusetts who depended upon the common schools for their instruction should have the best education which those schools could be made to impart.

Having been in political life the preceding ten years, Mr. Mann had a great number of influential friends and he did not hesitate to draw freely upon their stores of local information in his tours through the state. The result was that after several months of incessant labor in which he had travelled above six hundred miles, he had gathered together an immense mass of fresh and valuable matter when he sat down to prepare an "Annual Abstract of the School Returns." School returns had been received from two hundred and ninety-four out of the three hundred and five towns then included in the Commonwealth. He had made a searching examination of great numbers of school-houses and could report as follows: "I have personally examined, or obtained exact and specific information regarding the relative size, construction and condition of about eight hundred of those buildings, and general information concerning at least a thousand more." He speaks solemnly of the duty of school committee-men to personally examine candidates and not "inflict upon the children of a whole district the calamity of an ignorant, ill-tempered, or profane teacher." And, yet, he declares that he is of opinion that many are quite remiss and that examinations are very often omitted, or "formal and superficial rather than intent and thorough."

Another evil of great magnitude he finds in "the multiplicity and diversity of elementary books." The absence of children

from school also troubles him much. Of the 177,053 children between four and sixteen years of age in 294 towns, reporting in 1837, some 42,164 had no schooling in summer, and 23,216 neither in summer nor winter. Having got at the facts he set vigorously at work to correct these evils. In a supplementary report he thoroughly discusses the location, ventilation, warming and lighting of school-houses; also, the matter of desks, seats, windows and play-grounds. He urges teachers to see that the seats and buildings are not defaced, to look after the fire and keep the room comfortable, to enforce cleanliness and neatness, and guard the manners and morals of their pupils. He declares that every school-house should be provided with a bell, a time-piece, a pump or well, and mats and scrapers. Seldom has any man scrutinized every detail so thoroughly or offered such wise and practical suggestions by way of remedy.

Space forbids any searching examination and presentation of this or succeeding reports. During twelve years Mr. Mann continued to present the most careful results of his exhaustive consideration of the evils of the common school system and the remedies which occurred to his own powerful, luminous and practical mind or which experience, observation, reading and discussion in Europe and America suggested. In closing his second report he notes that "the alarming deficiency of moral and religious instruction" which he had fearlessly exposed the preceding year had "turned the attention of some of the friends of education to the subject * * to supply the desideratum." And this was the case, notwithstanding the fact that the Bible was then "used in almost all the schools, either as a devotional or as a reading book."

Here lay Horace Mann's power. He knew how to arouse the intellect and stir the conscience. He set men to thinking. Nor did he leave them in the dark to grope their way. Rather he cast up a broad highway and invited them to walk thereon. Soon the eyes of the state, and in a measure of the nation rested upon him, and men of "light and leading" carried through the reforms which he showed to be necessary. Among the subjects to which he directed public attention were the employment of children in manufactories, the need of school district and public libraries, qualifications of teachers, the effect of education upon the worldly fortunes of men, the study of physiology (a powerful

plea that it be taught in common schools), methods of teaching, teachers' associations, government of schools, (obedience secured through affection and respect, not by fear), regular attendance of all children, and teachers' wages. Forty-four years ago the women teachers of Massachusetts taught eight months during the year and received *on the average* $8.55 per month, exclusive of board, — making the princely income of these good ladies, $68.40 a year each.

Horace Mann was tremendously in earnest. He believed in education; in education for the heart and conscience as well as for the intellect. He strove earnestly against sectarian prejudice and bigotry, but no man more ardently advocated the reading and studying of the Bible in all the schools. Standing before the authorities of Boston on the Fourth of July, 1842, delivering an eloquent oration the burden of his message rang out in these words, *Teach the people.* Teaching to him was a god-like work. On one occasion he declared "The highest duty of a teacher is to produce the greatest quantity and the purest quality of moral action." He himself was a teacher, a statesman, and a prophet. He saw what might be done if *all* the children of each commonwealth received that instruction which he wanted them to have in physiology, in Bible truth and in the rudiments of learning. He believed in a sound body, a trained mind, and a pure heart. He sought to ennoble the teacher that the latter might inspire the scholar. His voice, his pen, his life acted together. The benefits which he conferred upon the Commonwealth in lifting up the standards of education and pointing multitudes the way to their practical attainment is beyond all power of mathematical computation. How many caught inspiration from his face and words! For them and for many others who never saw him he widened the horizons of learning.

It seemed as if nothing could take him away from this educational work in which his whole soul was enlisted, and which made life-destroying drafts upon his strength. But a greater work imperiously called him in 1848, and he obeyed the voice of suffering humanity and of God. On the twenty-third of February, that year John Quincy Adams died suddenly, and on April 3rd, Mr. Mann was elected as his successor in Congress. Here he did heroic service for the cause of freedom and truth. He hated slavery and fought it with might and main, but not in just such

ways as Wendell Phillips. The Southerners saw in him a broad-minded, powerful antagonist. Webster looked darkly upon the man who declared his Seventh of March speech to be "an abandonment of all he had ever said in defense of the great principles of freedom," and that he had "consented to treachery" and "proposed to do more villainies than were asked of him."

After five years of arduous and brilliant congressional life, as soon as Pierce was inaugurated President — March 4, 1853 — Mr. Mann shook off the dust of Washington, and prepared to take up the last work of his life, the presidency of Antioch College, at Yellow Springs, Ohio, to which he had been formally elected in the preceding September. To this luxuriant young enterprise he gave the last six years of his life, years filled with numberless harassing trials and financial perplexities, and also with almost superhuman efforts to meet the incessant demands made upon his brain power.

As a warrior in battle, so Horace Mann fell — at his post. It was on Aug. 2, 1859. For two hours, with the death-dew on his brow, he spoke earnestly to the students and friends who thronged his dying chamber. He warned, he praised, he exhorted, he inspired. Then a friend led in prayer, a momentary struggle, and the gates of glory opened and he passed within.

He is dead these thirty-two years, and yet "his works do follow him." The good in his case has not been "interréd with his bones." The great movements which he set in motion move on. They rise like the tides of the ocean and make themselves felt on distant shores. He built himself into the young life-blood of the nation. In all our halls of learning his name is spoken with honor. His figure in bronze on stone guards the portals of the Capitol of Massachusetts. But bronze and stone are dead. His spiritual figure breathes inspiration to purer, truer, nobler thinking at the portals of every school and college and seminary of learning in America.

EDITORIAL.

THE death of Dr. John Hancock, State Commissioner of Ohio, removes a modest, upright, self-made man and one of the most popular, industrious, and successful educators in the country. The loss of such a man is not limited to the state he served so faithfully till the very moment of death — it is national.

DR. WILLIAM A. MOWRY, for several years editor of EDUCATION, — although his relation to the magazine has been but nominal since the present editor took charge last December — has been elected Superintendent of Schools for Salem, and enters upon his new duties the first of this month. The good old city of Salem gives him a most cordial welcome and the best wishes of the great family of EDUCATION go with him as he enters upon the new duties for which he is so admirably equipped. We also expect that the columns of EDUCATION will be frequently enriched by contributions from his fertile pen.

THE very able articles by Professor Conway Macmillan, State Botanist of Minnesota, which appeared in EDUCATION last spring, have attracted much attention and awakened discussion. The teachers of botany in one of the leading cities of New England write us saying: "We have long felt that the best book on botany has not yet been written. Professor Macmillan's articles make us still more sure of it." They express the hope, in which we are sure many more join them, that he will prepare such a book or "at least make out a syllabus" which could be used by teachers and students.

COMMISSIONER MORGAN, of the Indian Bureau, is to be congratulated upon his successful management of the delicate and important duties assigned him. He has greatly improved the Indian schools, and his wise plan for government schools in which at no distant day *all* Indian children may be educated, has already received the cordial approval of the great majority of the American people. It is particularly fortunate that his recent controversy with the Catholic Indian Bureau has, happily, terminated in an amicable understanding between himself and Cardinal Gibbons, Bishop Ireland, and others, by which harmony of adjustment will be possible for the future. It is

highly desirable that all branches of the educational work shall be carried on with good will and general coöperation.

THE death of James Russell Lowell removes one of our most eminent men of letters. He was so much younger than Whittier or Holmes that we had not yet thought of him as a mark for death. Rather it seemed that in the evening calm, at Elmwood, he might for some years garner the aftermath of a singularly rich and original literary and poetic harvest. But it was not so to be. His work is done. And at seventy-two, crowned with honors in the choicest fields of literature and diplomacy, he rests from his labors, an dthe whole English-speaking world bows sorrowfully above his grave. He has shed undying lustre upon an honored name. It would be hard to point out any public man in America who has been so notably successful in three distinct lines of activity. As a diplomatist he had no superior, if indeed an equal. In literary criticism he had no peer. As a poet his name is forever interlinked with those of Longfellow and Whittier and Holmes. A modest man, an upright citizen, an intense patriot, a great and wise and good man; in the death of James Russell Lowell the nation loses one of her brightest ornaments and the republic of letters sustains an irreparable loss. Emerson, Longfellow, Lowell, — who can fill their places? The world seems emptier. In their upper seats Whittier and Holmes sit solitary. Their dim eyes may see ghosts; but our grosser vision sees only empty chairs.

THE Summer School for Teachers is evidently a fixed and permanent institution. A modicum of study and attention to best methods, a careful strengthening of weak places, and a general inspiration and uplift of enthusiasm, sandwiched in with thick slices of rest and recreation, have in multitudes of cases proved a better rest and upbuilding, both physical and intellectual, than the rest of *rusting* all summer. These schools illustrate the general principle of the survival of the fittest and those really the "most fit" grow, develop, expand, and thus increase their power. Chautauqua has for years proved its usefulness, and therefore fitness to flourish. Glens Falls has of late years made great improvement and the present year has been an inspiration to a large number of wide-awake teachers from all parts of the country. Martha's Vineyard Summer Institute, the oldest of the summer schools for teachers, has this season outdistanced all her past records, and in many respects may be called a model.

A single fact, brought out at this school, throws a flood of light upon the question of the general improvement of our educational affairs, and especially the elevation of the quality of teachers. At the Vineyard

school several years ago the average annual salary of those in attendance was a trifle under $400. Last year it reached the sum of $500. This year the average, as given in by the teachers themselves, was $714.

THE Toronto meeting of the National Educational Association was a memorable one. It was indeed an international gathering. The topics considered were important ones, and both papers and discussions were in the main of high character. Dr. Harris's plan for *round tables* attracted much attention and received general indorsement. The Council kept up its high reputation and several important discussions took place in it. One thing is evidently true:—the educators from the States came home a with pretty high opinion of the educational work and workers of the Dominion. If anybody went up to Toronto with the idea that we were to shed great light upon the Canadian educational world they doubtless changed their minds before their return. The Canadian speakers stood up like men and spoke, —generally without notes,—upon the most important themes, with the greatest ease, and their suggestions and opinions were well received by the "Americans." In elocution, oratory, and general effectiveness as speakers, it was commonly conceded that the Canadians excelled. Such international meetings are calculated to do much good to both countries.

THE sixty-second annual meeting of the American Institute of Instruction at Bethlehem was, educationally, a great success. President Huling and his co-workers are to be congratulated upon their good judgment and skill in arranging and carrying out a wise program. The plan of devoting an entire day to one subject is surely a wise one. The "Physical Training" day will long be remembered by many. Dr. Emerson showed clearly that he was a "born teacher." Dr. Enebuske's paper read by Miss Homans will be widely re-read in the published volume with careful attention. It was a masterly presentation of this important subject. The keen, critical, analysis of the principles underlying physical training was of the highest character. The presentation by Dr. William A. Mowry of what Boston has done in this matter of physical training, was listened to with much interest.

Bethlehem outdid herself in making all feel at home, and by assiduous care and attention to the wants of her guests, she has earned the reputation of being the most attractive "summering place" among the White Mountains. The American Institute of Instruction is not only the oldest general association of teachers in America, but it is increasing in vigor and usefulness as the years go by.

ONE more university is needed; — for the schooling of the grand army of self-elected leaders of "the people's party," whose stock in trade is the denunciation of wealth and the defamation of rich people as unfit to live, with prophecy of their disappearance in "the coming age." As eighty-five per cent. of the billionaires and millionaires have come up from the ranks, it would seem that this chronic depreciation of their own offspring was another illustration of the old saying, "It 's a foul bird that defiles its own nest." If the few who thus rise from obscurity become the chief peril of civilization, pray what will happen when the Farmers' Alliance, the Knights of Labor and the overwhelming majority of the "sons of toil" take possession and reverse the machine according to their own sweet will? The one defect of this whole crowd of extempore leaders, a complete disqualification for real leadership, is their inability to comprehend the fact that wealth is simply the outward representative of the organizing, combining, executive motor power that makes possible a modern as distinguished from an Asiatic civilization; and that in a country like ours, a rich man or woman, enlightened, broadened, and trained by wide knowledge of common human nature and the handling of large material interests, lifted by Christian consecration to an overlook of society is the "angel strengthening" every good work. There seems to be a strange lack of faith among so many of the "reformers" of the time in the possibility of resisting the temptations of wealth. Since nobody, however able and good, can alone accomplish any good thing, would it not be worth while, until the aforesaid university can be endowed, for somebody to write a book, setting forth the good things that have been done during the past century in this Republic by good men and women blest with riches, with an appendix showing what probably would not have been done, had the present race of demagogues who aspire to lead the laboring classes been, themselves, the owners of this property.

THE educational mission-field of the South, during the past summer, has suffered a loss, the significance of which long years alone can reveal, even where it is now so keenly felt. Early in the summer, the Tileston school for white children and youth, at Wilmington, N. C., was permanently closed, by the retirement, from increasing age and infirmities, of Miss Amy Bradley. In the good time sure to come, when the upheaval of the southern life of the past quarter of a century will reappear, idealized and interpreted in a new American literature, the career of this woman will be, in itself, a theme for biography or romance. Born in that marvellous manufactory of superior

women — the state of Maine; a Boston school-mistress; a teacher in Central America; unsurpassed among the group of army nurses — whom the soldiers crowned with the name "mother" — the close of the war found her in feeble health, at an age when even the most ambitious woman might be content to retire upon her laurels. But such people as Amy Bradley are only "getting interested" when even their best friends are thinking of their euthanasy. At the little city of Wilmington, N. C., among the swamps of south-eastern North Carolina, where her own heart had bled from the sufferings of her "dear boys in blue" in a Confederate prison, she found the work of twenty-five such years as are vouchsafed to few, even of the grand workers of any age. Off in an obscure corner of the place, "Dry Pond" was one of those colonies of hopeless white people, the "poor white trash," for whom the old Southern civilization "had no use." She began by bribing half a dozen rough boys, with their dogs, to come to the little schoolhouse that some good man turned over to her for use. A hard winter found her school enlarged and another building the resort of the wretched fathers and mothers of her growing flock. To every soul in any great strait of heroic labor, sacrifice, or suffering, comes, in due time, the "angel strengthening him." In this case, the messenger of glad tidings was good Mrs. Mary Hemenway, of Boston, who "took stock" in Amy Bradley by building the best schoolhouse then in south-eastern North Carolina, and for twenty-five years supporting an excellent graded school free to all of this class who chose to come. After the usual preliminary tussle, to which every southern community treats the man or woman who comes from the north "bearing gifts," Miss Bradley was recognized, adopted, and appreciated at her full desert, by the educational public and city of her adoption. Long ago she dried up "Dry Pond"; abolished the "poor white trash" of Wilmington; and the children of those old "low down" families are now among the successful and worthy young people of the town. At one time she held the office of superintendent of public schools, probably the first woman in the South appointed to such an office, and from her administration dates the movement which has given to Wilmington a good system of free schooling for white; while a corresponding establishment by the American Missionary Association has stimulated the free schools for the colored children. After these long years of splendid service the good old lady has now retired. Doubtless some disposal will be made of the fine school property by the wise and benevolent lady who has already expended $125,000 upon the 10,000 white people of Wilmington.

FOREIGN NOTES.

GREAT BRITAIN.

Progress of Hellenic Studies in 1891.—At the annual meeting of the English Hellenic Society (June 23) the president, Professor Jebb, delivered an address on the progress of Hellenic studies. The record, both literary and archæological is rich and varied and well calculated to offset the popular arguments against classical studies. Among the excavations accomplished the work of the American school at Eretria is peculiarly interesting. The belief that one of the tombs there opened is the family grave of Aristotle rests partly on an inscription which as restored bears the immortal name, and partly on some objects found in the tomb, viz.: a pen, two silver styli, and a statuette which appears to be that of a philosopher.

The literary record of the year includes an unusual number of great works illustrative of archæology. Among works bearing on Hellenic studies, the most conspicuous, in Professor Jebb's opinion, are the two volumes of Mr. Freeman's "Sicily." These carry the story down to the beginning of Athenian intervention (433 B. C.). The author hopes to continue the narrative at least to the death of the Sicilian Emperor, Frederick II., 1250 A. D. "No previous writer;" says Professor Jebb, "has essayed to tell the story of Europe's central island, 'the meeting-place of the nations' as a whole; nor has any, probably, been so well qualified to relate alike the strife of Phœnicians with Greeks, and the strife of Saracens with Normans." Another literary event of note in this record is the completion of the third edition of Dr. William Smith's Dictionary of Greek and Roman Antiquities. The forty-three years which have elapsed since the last preceding edition have been so fruitful in fresh material that the new issue is almost a new book.

In other departments of literature no event has excited so much interest as the publication by the British Museum, from the newly-found papyrus of the Treatise on the Constitution of Athens. * * * "As might have been foreseen," says Professor Jebb, "Aristotle's authorship has already been questioned, but thus much, at least, is certain; this is the treatise which passed in antiquity as his; and it was written either in his lifetime or soon after his death."

Another remarkable discovery published this year, is as yet, perhaps less widely known. During a visit of the Emperor Hadrian to Athens

— probably at his first visit, in 123 - 126 A. D. — an Athenian philosopher named Aristides, addressed to him an eloquent apology for Christianity. The interesting story of the recovery of this apology as told by Professor Jebb is too long to be repeated here. A fact of general interest is, that the apology contains a distinct allusion to a written gospel. "It may serve," says Professor Jebb, "to remind us that the Christian — we might add the Jewish — regions of Greek literature still offer a comparatively fresh field to research."

Technical Education. — The years 1889 and 1890 will be memorable in the Educational history of Great Britain on account of the impulse given by legislative acts to technical instruction.

The technical instruction Act of 1889 (applicable to England and Ireland), although severely criticised by scientists and educators, has proved to be an extremely valuable piece of legislation. Without the provisions of the Act, England would have been entirely destitute of the machinery for the utilization of the fund unexpectedly placed at the disposal of the County Councils in 1891.

By the Act of 1889, local authorities were empowered to call for appropriations from the local rates for the support of technical instruction, and to provide the agencies for such instruction. Scotland had previously secured a technical Education Act of broader scope, while in Wales, the subject was covered by the intermediate Education Act. Here and there local authorities took immediate steps under these acts for the promotion of technical instruction. In 1890 there was allotted to the county councils of England and Wales the sum of £743,000 ($3,715,000), and to those of Scotland an additional £50,000 ($250,000), the net proceeds of the duty on beer and spirits, with permission to apply the same to technical education. The National Association for the promotion of technical and secondary education at once redoubled their efforts to secure increased resources for the development and effective organization of technical instruction. The outcome of all these efforts so far as the action of the counties goes, is graphically shown by a map in the annual report of the National Association just published. From this map it appears that a large majority of the county councils, i. e., 83 out of 122 (English and Welsh) have been induced to appropriate their share of the fund as the Association desired. London and Middlesex according to the report, enjoy the unenviable distinction of having desired to employ their position solely for the purpose of reducing the burdens upon the rates. It is hoped, however, that this policy will not be insisted upon.

The most important action taken by the counties with respect to the practical organization of the work, is the appointment of organizing

secretaries. Twenty English counties have now special educational departments with paid secretaries, most of whom have been selected with reference to their fitness for the special duties. A conference of these secretaries was held in August with the object principally of exchanging views. In this conference it was clearly indicated that what is absolutely required as a preliminary to effective technical instruction is a network of good secondary schools, whose advantages shall be within the reach of the sons of artisans, laborers, and small farmers. Fortunately, the definition of technical instruction in the Act of 1889, is sufficiently wide to cover most of the subjects which custom assigns to the secondary stage of education.

In their deliberations, the county councils give much attention to the technical education of girls. It is further noticeable that Oxford and Cambridge are taking steps to provide suitable teachers for the new demand.

Abolition of School Fees. — The most important educational measure reported from England is the passage of the bill abolishing school fees. The bill allows to every school under the inspection of the education department, a free grant of 10 s. on the average attendance of children from the ages of three to fifteen, in addition to the grants heretofore provided for. It is calculated that £2,000,000 ($10,000,000) will be required from the public exchequer to meet the outlay, which will swell the total grant to about £6,000,000. This sum will meet about 77 per cent. of the expenses of the schools, the balance will be covered in board schools mainly by local rates, and in denominational schools by private subscriptions. The bill makes no change in respect to the control of the schools, hence, denominational schools with greatly increased public revenues, continue to enjoy their immunity from popular control. That these schools are essentially sectarian is indicated by the fact, that in the Church of England schools which form 61 per cent. of the total number of elementary schools, there is hardly one non-conformist master or pupil teacher.

In the original draft of the bill, the free grant was allowed on the average attendance of pupils five to fourteen years of age; the adoption of three to fifteen, is an important concession, particularly as regards the upper limit. It is a curious fact that this bill has been carried by a party largely opposed to its underlying principles, but actuated by a desire to forestall the opposition, who would, it was feared, at the first opportunity, bring forth a measure much less favorable to denominational schools.

GERMANY.

Movements favorable to the higher Education of Women. — The German Women's Reform Union has at last made a break in the opposition to its efforts for larger educational provision for women. A petition was sent to the parliaments of the different states asking for the establishment of a girls' gymnasium or permission for girls to pass the *Abiturient* (final school) examination at a boys' gymnasium, and also to obtain a certificate of satisfactory preparatory work which shall admit women to the university course. The education commission from the Prussian House of Deputies, rejected the proposal of the government member to shelve both parts of the petition, and recommended the second part (i. e., permission for girls to pass the *Abiturient* examination) to the consideration of the government. As the *London Journal of Education* observes, "The further discussion of this all-important social question is thereby rendered certain."

Among the numerous educational associations of Germany whose annual meetings are held in May, should be noted that of the General Union of German Woman Teachers, which was founded a year ago. The Union has thirty-two branches with 3,279 members, of which 730 belong to the English branch union. Petitions are to be presented demanding greater influence of educated women teachers on girls' education, and the admission of women to the universities.

University Notes. — The Prussian bureau of statistics has recently published tables showing the average duration of professional courses of study and their extension by reason of the military service required of students. This extension ranges from one to three semesters. The number of university students in Germany still continues to increase, especially in medicine. In seven years the number of successful candidates for the official certificate has doubled, being 1,409 in 1888-89 against 692 in 1882-83.

The University of Berlin is about to come into possession of a legacy bequeathed several years ago by Professor Jungcken. The sum amounting to $325,000 is destined for general purposes. It is reported that several other professors will follow the precedent set by their colleague, and also that an opulent American farmer, who in his youth had the benefits of a scholarship in Berlin, has reserved $200,000 as a bequest to his alma mater. This sum is intended for the benefit of students in law or in theology. The seminary of Oriental languages continues to be a centre of interest. In the last winter semester it enrolled 101 students.

FRANCE.

The receipts of the Paris facultés for 1890 amounted to 764,891 frs. ($152,978), and their expenditures to $144,086.

The annual banquet of the "Students Association," given in June, was particularly brilliant. The Minister of Education, M. Leon Bourgeois, presided, and Jules Ferry made an inspiring address. The deputy of Paris promised to demand from the Chambers $2,000 for the benefit of the association.

JAPAN.

The progress of education in Japan is seriously threatened by the economic policy of the present government. The annual appropriation is to be reduced by one-half. The blow is directed particularly against the five national secondary schools created in 1885, and which served as feeders for the university. This economic policy is accompanied by a reaction against Occidental influence and models.

A. T. S.

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned. Articles of special importance to teachers will, as a rule, be mentioned in notes.

Architecture of London in the Nineteeth Century, The. *Edinburgh*, July. On government buildings, bridges, club-houses, and private residences. "Plan of Houses of Parliament — four main corridors meeting in a central octagon; towers at extreme end of buildings mark it out at a distance, when the rest of the building cannot be seen; one purely a state ceremonial tower, marking the royal entrance, and, therefore, treated as a piece of architectural effect merely; the other a utilitarian tower, intended to carry a great clock and designed so as to express that function."

Catholic Theology in England. W. H. Kent. *Dublin Review*, July. A historical retrospect from "the venerable Bede" and Alcuin to Fathers Carleton, Kellison, and Holden. Shows that mediæval theology was influenced considerably by Englishmen. Calls upon English Catholics to emulate theologians on the Continent.

Coup d'œil sur l'histoire de la Philosophie en Russie. F. Lannes. *Revue Philosophique*, July. The first of a series of articles, showing how philosophy in Russia has scarcely separated itself from theology and mysticism, and how any speculation can hardly escape being suspected either by the government or by the church.

Darwinism, The new. J. T. Cunningham. *Westminster*, July. Writer does not accept the "natural selection" theory as the all-sufficient explanation of the evolution of organisms. Denies the validity of Weismann's theory.

Dutchman at Home, The. Charles Edwards. *Macmillan's*, August. Time to see the people of Holland at their best is in winter, on skates.

English and American Newspapers. *Lippincott's*, July. In England, editorials generally regarded as most important. "Key-note of American newspaper is news. Along side of that, opinions are of small value in the eyes of American newspaper men. If a young man wishes to become a journalist here, he begins as a reporter of the smallest items. During his training, he is taught the value of news, the methods of getting it, and the absolute necessity of getting it at once."

Germany, The Making of. *Quarterly*, July. "With Leibnitz, the line of 'light and leading' begins. In Lessing, we salute the first German classic. Goethe and Schiller create a literature which is the common heritage and priceless treasure of the Fatherland, binding it in intellectual solidarity. Kant establishes the ethical unity of his country upon the adamantine foundation of the transcendental morality. Hegel supplies the cohesive doctrine of political science, and exhibits the type of the state in which the men of action were to complete the unifying action of the men of thought."

Goethe's friendship with Schiller. Professor Dowden. *Fortnightly*, August. Gradual drawing together of the two — "on the one side the stiff Geheimrath, a middle-aged courtier, now grown somewhat stout and heavy-jawed; enjoying a tranquil self-possession, having a fund of varied experience, and bearing a reputation for epicurean tolerance; and on the other side the eager idealist, his tall, spare figure, his narrow chest, his restless energy, his aspiring gaze, his exalted air, and his phrases from the Kantian philosophy."

Historical Drama and the Teachings of History. Hugh E. Egerton. *National Review*, August. "The Elizabethan Drama represented to the men of its day something of what newspapers, circulating libraries, and lecture-rooms are to us. At the present day, it would be impossible to reproduce anything like the historical drama of the Elizabethan age. Another Shakespeare is not likely to visit us; nor in any case would he now, in all probability, employ himself in the writing of mere stage plays. The drama generally, as the highest expression of literary thought, belongs to an earlier stage than the present. It stands to general literature in something of the same relation that sculpture does to painting. The historical drama, above all, is at issue with the scientific character of the age, for that scientific character is fatal to illusion."

Identification by Finger-tips. Francis Galton. *Nineteenth Century*, Aug. Useful in prisons, and in the colonies where one native often passes for another. Pattern in the ridges of the skin, owing to the finger nail, not alike in any two persons and remaining the same throughout life, changing only in size.

Industries of Ancient India, The. Rajah Murli Manohar. *Nineteenth Century*, July. Hereditary development of faculties and organs due to caste. Before British rule, over population checked by famine, pestilence, war, etc.; now problem of providing food. In ancient India, many industries, which were destroyed by Mohammedan conquest. These should now be revived.

Italy, France, and the Papacy. Signor Crispi. *Contemporary*, August. "A Republic in Italy is the desire of those who do not desire national unity. It is the aspiration of the Vatican. Reconciliation between Leo XIII. and the Italian government was prevented by the Jesuits and French ecclesiastics."

Mediæval Athens. Review of Gregorovius' history. *Quarterly Review*, July. "But for the Slavonic mixture, which they are now fain to repudiate, it may well be that the modern Greeks would never have had the force in them to throw off the yoke of the Moslem."

Model City, A; or, Reformed London. V. Trees and Flowers. Prof. H. Marshall Ward. *New Review*, August. On the trees and flowers that could be cultivated successfully in a large city.

Names in Novels. W. P. J. *Blackwood's*, August. Story of "Balzac's famous search, which ended in the discovery of the name Z. Marcas, — a name to fit his hero in every respect. Influence of association astonishingly powerful and difficult to discount. Doctor Johnson uses significant names in his comedies, Shakespeare is sparing of them."

Old Testament Study, Present state of. *London Quarterly*, July. Conclusions of this conservative Review are: (1) On many points, judgment

may for a while be wisely held in suspense. (2) There is nothing in the discussion of these literary questions to disturb the foundations of faith. (3) Attention should be concentrated on the more vital points of the relation between the Old and the New Testaments—e. g., Messianic prophecy, Typology, and the quotations from the Old Testament in the New. (4) Religious teaching should be set in the foreground; the uncritical may for the present go their way, and leave many of these controversies to burn themselves out."

Penal Laws, The: An historical retrospect. W. S. Lilly. *Dublin Review* (Catholic), July. "The special characteristic of the English Reformation is that it attributed to the Crown the whole of the authority which it denied to the Pope. The contest between the papal power and the regal power had been waged, with longer or briefer traces, from the days of the Norman Conquest. In the Anglican Reformation it is impossible to trace any religious motive. If the laws devised to crush out the Catholic religion in England had been exerted to their utmost rigor, Catholicism would have disappeared from the country."

Politicians as Historians, The. *Westminster*, August. "Unless voters are taught history, they will either care nothing about imperial politics, or else will apply to them the same methods which are found successful in local politics. With many men, the county is coming to take precedence of the country. Too many professors of history are only antiquarians. He who has made the history of the nineteenth century is better qualified than any of his contemporaries to understand the politics of the eighteenth. Before our voters can profitably study history, either our historians must become politicians, or our politicians must become historians."

Port-Royal. *London Quarterly*, July. "St. Cyran, holding doctrine of damnation of unbaptized infants, founded educational system of Port-Royal upon a deep distrust of human nature. The children were never to be left to themselves, but subjected to constant (but most affectionate) oversight."

Portugal, The future of. Oswald Crawford. *Fortnightly*, Aug. "People in Lisbon and the towns are mostly descendants of Moors, Jews, and Moorized Christians. They have affinities with the East through Africa, and are wholly out of sympathy with the rest of Europe. The rural population are descendants of the former warriors and discoverers. Retention of colonies by no inherent power of Portugal; it owes much to jealousy of rivals."

Rousseau's Ideal Household. Mrs. Andrew Lang. *National Review*, August. A sharp criticism of home education in the *Nouvelle Héloise* and *Emile*.

Scartazzini's "Prolegomeni" on Dante. *Church Quarterly Review*, July. Completing the author's celebrated edition of the *Divina Comedia*; rejects many of the stories about Dante's life. "To the objection that he put so few of his contemporaries in Paradise, Doctor S. answers that the necessity for the introduction there of so many learned saints and doctors capable of aiding Beatrice in increasing the poet's knowledge and solving his difficulties, precluded him from giving up space to interviews with contemporaries who would have been incompetent for that task."

Tactical progress during the last twenty-five years, Studies in. *Blackwood's*, July and August. On the methods of the Germans in the Franco-Prussian war. "From 1806, battle of Jena, to 1866, Napoleon's method followed by all continental armies—strong battalions moving as unit. Tendency from 1866 to the greater individualism of companies, more depending on tact and bravery of subordinate leaders."

Village education under popular control. J. T. Macnamara. *Westminster*, August. "In nine cases out of ten, popular control in these very small areas means inefficient and often incapable management." The writer favors enlargement of areas of School Boards, or County Boards over the District Boards.

J. P.

AMONG THE BOOKS.

Corneille's POLYEUCTE, edited with an introduction and notes by Alcée Fortier, of Tulane University, has been issued in Heath's Modern Language Series. Polyeucte is one of the most inspiring, as it is one of the most noble of Corneille's tragedies.

The Secretary of Public Instruction in Guatemala has issued his report of the state of public schools in the Republic of Guatemala, for the year 1890. From the report we learn that the schools there are in a very satisfactory condition, that there was an increase of 100 schools over 1889, and an increase of nearly 13,000 scholars. There are seven normal schools, thirteen kindergartens, and various special schools, all supported by the Republic.

To their College Series of Latin Authors, Ginn & Company have added LIVY, Books I. and II., edited, with introduction and notes by J. B. Greenough. In placing the notes at the bottom of the text which they are intended to annotate the usual custom has been departed from, but when these notes are for the specific purpose of aiding the pupil in learning to read Latin with readiness and accuracy, their position is well chosen. The notes are concise, free from historical and intricate grammatical lore, and thoroughly helpful.

D. F. Lincoln, M. D., late Secretary Health Department of American Social Science Association, has prepared a text-book for the use of schools, entitled, HYGIENIC PHYSIOLOGY. The book is intended for pupils from twelve to fifteen years of age, and is written in a style easily understood by children of school age. Starting with the object in view of giving to young people something rather more directly practical than is usually found in school physiologies, the author has on most subjects given a minimum of anatomical detail, but a good deal of practical information and much sensible direction. The book will interest and satisfy teachers and find warm advocates in the children using it. Ginn & Co., publishers.

It is sometimes asserted that English Grammar is worse taught and less understood than any other subject in the school course. Book publishers affirm that this is largely due to the kind of text-books used, and add that their new book will, if properly used, work a revolution in this matter and render grammar one of the most fascinating of studies. But teachers are more than text-books, and even with a poor text-book a good teacher may secure excellent results. Given a good teacher and a good text-book and there will be little room for speculation as to results. In Longmans' SCHOOL GRAMMAR, there is given everything relating to the subject of grammar, and fitted to every grade of school. While it is constructed on somewhat old-fashioned lines, the idea of language teaching has not been lost sight of, and the book is full of examples illustrating the technical definitions. It is a grammar that can be used without the aid of a teacher. Longmans, Green & Co., New York.

HELEN, THE HISTORIAN; a new short story by Pansy. Helen, a little suffering child, who is fading slowly but surely out of life in a city hospital, gathers the children of the hospital about her bed on Sunday mornings and tells them Bible stories. These stories are told very sweetly and simply, so that no child could fail to understand them or be interested in them, and they may be considered a valuable addition to Sunday-school literature. D. Lothrop Company, Boston.

THE DAUGHTER is a book full of sensible suggestions to mothers and daughters on the health, education and wedlock of the latter. The author, William M. Capp, M. D., is a physician of Philadelphia. The topics discussed are: the infant, the child, the girl, the wife, and general suggestions upon health. There is a great deal in this little volume which every mother and prospective mother ought to know. If its wise advice is acted upon, much needless pain, discomfort and bodily suffering may be avoided. It is well worth one dollar. Published by F. A. Davis, 1231 Filbert Street, Philadelphia.

In a book of 292 pages, Prof. George A. Osborne, of the Massachusetts Institute of Technology, has given the elements of the DIFFERENTIAL AND INTEGRAL CALCULUS. This is a difficult subject to present to students in a text-book, and one that will tax the ingenuity of the most erudite in mathematics, but Professor Osborne seems to have happily overcome every obstacle and to have made a book which beginners in Calculus may use with comparative ease. The steps taken in unfolding the subject are slowly taken, technical terms fully explained and illustrated, and numerous examples and applications furnished. Published by Leach, Shewell & Sanborn, Boston.

Prof. G. A. Wentworth of Phillips Exeter Academy, has a reputation for a maker of mathematical text-books second to none in the country. His books bear the marks not only of practical use in the class-room, but also of the rare and high ability of the author as a mathematician. In his HIGHER ALGEBRA, Professor Wentworth has put such work as he knew the student in college and scientific school would need, and he has made a text-book which will be welcomed alike by professors and students. In the arrangement of topics and in the methods of presenting them, there is a decided change from the manner ordinarily pursued, and this change will be appreciated by those who believe that there may be something good in growth and development, even in methods and devices. Ginn & Co., Boston.

Mr. C. W. Bardeen has done a public-spirited act in reprinting from Superintendent Draper's annual report, James Russell Parsons' PRUSSIAN SCHOOLS THROUGH AMERICAN EYES. Mr. Parsons was U. S. Consul at Aix-la-Chapelle for a number of years, and at the request of Superintendent Draper, he prepared a comprehensive and detailed description of the plan of organization and the operations of the Prussian school system. Everybody — teachers in particular — is interested in Prussian schools, and this report brings to all just such information regarding teachers, school organization, courses of study, examinations, salaries, etc., as they most desire. It is, as Mr. Bardeen says, "the clearest statement that has ever appeared in English of just what the Prussian schools are doing." Published by C. W. Bardeen, Syracuse, N. Y. Price, $1.00.

Messrs. Lee & Shepard of Boston have just brought out an excellent five volume edition of the LIFE AND WORKS OF HORACE MANN. These volumes are of very great value to every true educator. The price of the set is $12.50; or separate volumes will be sold at $2.50 each.

Profs. Wm. R. Harper and Herbert C. Tolman, of Yale University, have edited EIGHT BOOKS OF CÆSAR'S GALLIC WAR. They have made an ideal text-book. For matter, manner, form, illustrations, information, grammatical, historical, and exegetical notes, no school book on Cæsar has ever surpassed this one. A dozen new features distinguish this edition from others, among which may be noted the indication in the text of every new word by full-faced type, the insertion of "topics for study," based upon the portion read, examples of inductive studies and lists of topics for investigation, etc., etc. American Book Company. Price, $1.20.

HOW TO SHADE FROM MODELS, by W. E. Sparks. This is a very helpful book for students of drawing. It is systematically arranged, and embraces the simple principles governing light and shade, together with experiments verifying the same. Thus the student may take an intelligent interest in his work and be able to account for all lights, shades, shadows, reflections and gradations as they occur. Careful directions with regard to the choice and use of material and methods of working from models, common objects, and casts of ornament are given. These are accompanied by plates illustrating the various steps and adding much to the value of the book. Cassell & Co., New York.

POWER THROUGH REPOSE, by Annie Payson Call, is a book full of sensible and practical suggestions, much needed in these days, when nervous disorders resulting from overwork are so prevalent. The reader is entreated to take rest simply and naturally, to relax or "let go" the muscles and the nerve tension, and let repose balance activity, thus establishing a true equilibrium. The chapter on "Nervous Strain in the Emotions" will be found especially useful in the training of young girls. The author is evidently in love with her subject, and has treated it in an interesting as well as forcible manner. The publishers are Messrs. Roberts Brothers, of Boston.

A bound volume of the CENTURY makes a very substantial, readable, and valuable book. This last volume covers the six months, November, 1890,—April, 1891. In these 960 pages the reader, no matter what his mental attainments, will find much to interest and instruct him. Here are three installments of the famous "Tallyrand Memoirs"; several "California Papers," by Gen. John Bidwell, Mrs. Frémont and others, of the greatest interest; then there are papers discussing prison life during the war, our navy, the Congo land, Thibet, and Mount St. Elias; there are delightful stories by Joel Chandler Harris, F. Hopkinson Smith, Edward Eggleston, Maurice Thompson, Mary E. Wilkins, Mrs. Burton Harrison, Richard Harding Davis, etc.; illustrated papers on "The Printing of the Century," "The Century Club," "Salons of France," art articles on "Italian Old Masters," "Two French Sculptors"; solid, valuable essays by Lyman Abbott, Albert Shaw and others, with a fine variety of poems, open letters, briefer stories and miscellaneous matter of present interest. It is a noble book, and as rich in illustration as in text. Published by The Century Co., New York. Price, $3.00.

ENGLISH GRAMMAR FOR BEGINNERS, is a bright little book of 120 pages, by Jonathan Rigdon, of the Central Normal College, Indiana. The author evidently knows the difficulties which beset the path of the instructor, and has made the book a helpful one in many ways. The subject matter is presented in a logical order, and the pupil is lead on by easy steps from the simple to the more complex.

ENGLISH GRAMMAR FOR THE COMMON SCHOOL, by the same author, is well adapted to succeed his more elementary treatise. The book is well arranged, clear and concise. In the hands of a skillful teacher, it will undoubtedly give the pupil greater proficiency in the use of language, more ability to think, and a more complete mastery of the art of speech. Both books are published by the Rigdon Publishing Co., Danville, Indiana.

The writers of text-books on Physiology have already covered the ground pretty thoroughly, but M. C. Tiers in A COMPEND OF ANATOMY AND PHYSIOLOGY has produced a somewhat novel work. Evidently intended to serve as a detailed key or index to the author's "Anatomical Manikin," it also gives a fairly good general outline of physiology. Its glossary of medical terms is a feature that will be appreciated by the unscientific reader. Published by Fowler & Wells Co., New York.

The Student's Series of Latin Classics, by Leach, Shewell & Sanborn of Boston, has recently received a valuable addition in the shape of MILLER'S LATIN PROSE COMPOSITION, Part II., for college use. This book is based directly upon Cicero, Cato Major and Laelius, and is intended to accompany the class use of these works. The student is thus given a model of style and expression, and a practical vocabulary in the classical author in hand. The use of this book should help to enliven the study of the art of writing Latin, invest it with new interest for the student, and lead to a more accurate classical scholarship.

The practical application of the theory of mechanics to the tools and appliances used in in-door and out-door work involves the use of such intricate mathematical formulæ that elementary classes frequently find the subject one of extreme difficulty. An easy introduction to mechanics, reasonably free from mathematical formulæ and clear in its statements, should receive a welcome. BOWER'S SCIENCE APPLIED TO WORK will help to supply the want in this direction. It is written in language easily understood by the young student, and seems to combine simplicity and accuracy. Published by Cassell & Co., New York.

THE ALHAMBRA, by Washington Irving, has been edited for the use of schools, by Alice H. White, and published by Ginn & Co., Boston. To shorten and simplify this favorite collection of history, legend and dreamy rambling narrative, without destroying something of its charms, is almost an impossibility. The editor of this number of the well-known classics for children, has dealt well with her hard task. The omissions have been made with good taste and judgment, especially the longer ones, which are legends of monkish greed, or chapters full of historic detail which might weary a child's mind. Foreign words and phrases have been translated, or discreetly omitted, and the definitions and notes are clear, simple and practical.

Gen. Benj. F. Butler has about completed his memoirs. The whole is to be compressed into one great volume under the title BUTLER'S BOOK. It will be read everywhere with the greatest interest.

The revival in the study of Civics has produced a goodly number of text-books on the Constitution of the United States. Supt. W. C. Hewitt of Three Rivers, Mich., has prepared a little book of 100 pages, entitled CIVIL GOVERNMENT OF THE UNITED STATES. The Constitution is taken up by sections and is briefly explained. Review and test questions follow each section. It will prove to be a handy book for district schools, and must serve a most excellent purpose in acquainting our boys and girls with the duties and privileges of citizens of this Republic.

It may serve a good purpose if the entire title of the little book before us is given: APPERCEPTION; or the Essential Mental Operation in the Act of Learning. An essay on "A Pot of Green Feathers." By T. G. Rooper, M. A., H. M. I. Doctor Harris recently said that the idea of apperception is the most important fruit thus far developed by the study of the psychology of pedagogics, and on his suggestion Mr. C. W. Bardeen has issued Mr. Rooper's Monograph. It is an earnest plea for a more comprehensive appreciation of the powers of a child's mind. The teacher should know how impressions are made on the mind of the child and how best retained there. Object teaching is urged that impressions may be correctly made, then must follow the interpretation of these impressions. The essay is one of the most timely and valuable contributions to pedagogical literature.

IMPRESSION DE THEATRE by Jules Lemaitre is a valuable little compend of some European dramatists. There are nineteen chapters, each sketching an author's life, and giving a review and criticism of his works. The opening chapter upon Ibsen commends itself to readers interested in Norwegian literature. Lemaitre compares Ibsen with Bjornson, the Victor Hugo of the north, beside whom he is relegated to mediocrity. "The Doll's House" and "The Apparitions" attack the institution of marriage, or at least the general understanding of marriage. The adventures of the heroines carry with them the instruction that marriage should be the free union contracted between two hearts and two minds, and that such a union could only be formed between two creatures whose education is finished, and who have each a conscience, and self-control, and who have been able to study each other mutually.

SOCIOLOGY is the title of a compact volume of exceptionally strong essays which had previously been delivered before the Brooklyn Ethical Association. Among the subjects discussed are: "The Scope and Principles of the Evolution Philosophy," "Primitive Man," "Growth of the Marriage Relation," "Evolution of Law," "Medical Science," "Arms and Armor," "Mechanic Arts," and "Wage System," "Evolution and Social Reform," very interesting chapters on Professors Asa Gray and E. L. Youmans. Among the writers are: Drs. James and Eccles; Professors Fiske, Sheldon and Gunton; Revs. Kimball and Chadwick; also C S. Wake, J. A. Skilton, Wm. Potts, H. O. Pentecost, and five others. These essays are, generally speaking, broad and philosophical, but at times narrow in their attitude towards religion. Published by James H. West, 196 Summer street, Boston. Price $2.00.

THE LIFE OF JANE WELSH CARLYLE, by Mrs. Alexander Ireland, is an instructive and interesting—at times painfully interesting—book. Thomas Carlyle was so great that the world has almost lost sight of his gifted wife in listening to his words of truth and wisdom or dyspeptic growling. But Mrs. Carlyle was a unique personality, as bright, eccentric and sharp-tongued for a woman as he for a man. She came of old patrician blood inclined to look down on the Carlyle peasants. A wonderfully clear-sighted maiden, this Jane, and having measured Thomas Carlyle's genius, she determined to mate with him. And this she did, after five years' courtship, on Oct. 17, 1826, when she was twenty-five and he thirty-one years of age. Both had had previous heart experiences; she with Edward Irving, her gifted tutor, and he with Margaret Gordon. Carlyle was drawn to Jane Welsh by her beauty, biting wit, rare intellectual gifts and independent spirit. She was drawn to him by her overpowering admiration of his genius and masterful way. They were a strange pair; ill-mated and well-mated. Both were high-strung natures with the irritability of genius. Each loved the other in a way. She was willing to suffer and die for him, albeit she could at times chide him right sharply, and he, down deep in his heart, loved his gifted little wife whose existence he made most miserable. It is the home tragedy, exaggerated, to be sure, which goes on in countless households where ill health and fretful spirits are in the ascendant. This life-story is well told and our sympathies, on the whole, go out to the wife so misunderstood and neglected by her renowned husband. It is a *Life* to be read carefully and will give rise to many serious reflections. The publishers of this book,—Charles L. Webster & Co., of New York,—have brought it out in excellent shape.

Every one in any way interested in Massachusetts will be delighted with the ATLAS OF THE STATE that has just been published. The work is in every way so far in advance of any previous state atlas that there is no opportunity for comparison. There is no atlas that approaches it in beauty of design, in clearness and convenience of arrangement or in fulness and accuracy of information. It is possible that there are errors, the magnitude of the work is such that an occasional mistake would be quite excusable, but the whole is certainly a marvelous approach to accuracy. All county and town lines are carefully and clearly shown. Roads with their names are given and by an ingenious device some idea of their quality may be obtained. Lakes, ponds, rivers, brooks and swamps, are carefully defined and their names given. All the railroads and stations are properly located, and the crossings of the public roads indicated in such a way that one may know at a glance whether it is overhead, underneath, or at grade. Churches, school houses, and post offices are given. Contour lines are drawn at every hundred feet elevation, and the hill names given. On the coast a water contour at eighteen feet depth, is drawn, while lighthouses, life saving stations, ledges and shoals are shown. In fact every point is carefully covered. The coloring is very artistic and the paper of excellent quality. The index includes every name on the numerous maps, so that the searcher after Boston or Tunipus beach can find the correct location at once. Too much cannot be said in praise of this remarkable and valuable work. Published by Geo. H. Walker & Co., 160 Tremont street, Boston.

Messrs. Geo. H. Walker & Co., are about to issue a new school map of Massachusetts. It is the first accurate map of the state, and will undoubtedly be appreciated by every one interested in local geography.

Dr. Alexander Macfarlane of Edinburgh, has issued in book form his PRINCIPLES OF THE ALGEBRA OF LOGIC, originally contributed to the Royal Society of Edinburgh, in 1878. The author endeavors to show that the analytical method of reasoning about Quantity is an Algebra. He illustrates his theory by investigating problems by means of this algebraic organon, using symbols rather than syllogisms, he makes his book resemble in appearance a work on conic sections. It is a thoroughly learned, ingenious, and scholarly work, and will delight the mind of the student of formal logic. It does not aim to be elementary, and can be read only by those who are thoroughly versed in the mysteries of *Barbara Celarent.*

No patient and thorough student of Psychology will fail to read OUTLINES OF PHYSIOLOGICAL PSYCHOLOGY, a Text-book of Mental Science for Academies and Colleges, by George Trumbull Ladd, Professor of Philosophy in Yale University. New York: Charles Scribner's Sons. 1891. Pp. XII., 505. Crown. 8vo. $2.00. The author has made a great reputation for himself by his earlier and more elaborate work, "Elements of Physiological Psychology," which appeared four years ago. Both are written from the physical and experimental point of view, with great candor, carefulness and completeness. This is a new book, and not a new and abridged edition of the former, covering, indeed, the same field, but with special adaptation to a briefer study of mental phenomena. This method of treatment is new, Professor Ladd is a pioneer in it, the material is abundant and widely scattered, and to collect it, coördinate it, and present it in due proportion and order, is a difficult task. This treatise is what it claims to be, a psychology, not a metaphysics, not a rational psychology, but it furnishes a basis and illustrations for these other departments of inquiry and knowledge. Readers of EDUCATION will observe with pleasure that the work is a text-book, and that the teacher as well as the pupil is considered throughout. The index and handsome illustrations are valuable features.

Few women in any time or land have accomplished so great and beneficent a work as Dorothea Lynde Dix. With a feeble frame she had the spirit of a hero, or of a martyr, and toiled on resolutely and energetically until fourscore years of age. She was the daughter of a shiftless son of energetic and successful parents. It is needless to say that the blood of her grandparents burned in Dorothea's veins. She was born in Hampden, Me., April 4, 1802, and died at Trenton, N. J., on July 17, 1887. After a bitter childhood she spent her youth in Boston, with her grandmother Dix, in unremitting physical and intellectual labor. She then became a most successful teacher and earned enough to start her brothers on the road to an honorable manhood. The great Doctor Channing delighted to have her as an inmate of his family and teacher of his children at various times. Becoming very weak and ill she spent much of 1836–'37 in England, and returned to take up the great work of her life. This was to improve the horrible condition of the insane, and to a less degree of prisoners and paupers. The story of her incessant journeyings to, and inspection of the poorhouses, dungeons, cellars, pens and outhouses in which the insane of Massachusetts were housed or chained in 1841–'43 shows her indomitable courage, strength and endurance. Her *memorial* was a terrible arraignment of inhuman keepers of the insane and led to vigorous legislative action to remedy these foul blots on our civilization. Having stirred Massa-

chusetts to action she turned to Rhode Island, New Jersey, Pennsylvania, Indiana, Illinois, Kentucky, Tennessee and other Southern states. All that this woman suffered in her arduous, perilous journeyings can never be known. Much is known of her wonderful power over men. She overcame opposition, aroused the enthusiasm of sluggish natures and opened public and private purse-strings in a marvellous way. No man or set of men could long withstand this pure, high-minded, sweet-faced, but iron-willed woman. How anyone could travel, and write, and plead with men as she did year after year and still live on, only God knows. Her best friends looked on in amaze. She was an angel of love, and peace, and light; or, if need be, of adamant. But we have not space to say more of her great, unselfish and enduring work. To understand this more fully we refer the reader to the LIFE OF DOROTHEA LYNDE DIX, by Francis Tiffany. It is published by Houghton & Mifflin of Boston. Her last years were full of suffering, but she was tenderly cared for, in rooms set apart for her in the asylum she had been instrumental in building, at Trenton, N. J. She is dead, but her works follow her, and the memory of a saint remains.

It is interesting to the American classical teacher to compare the elementary Latin books used in Great Britain with those prepared for American pupils. AN INTRODUCTION TO THE LATIN LANGUAGE, by Maurice C. Hime, LL. D., the Head-Master of Foyle College, an intermediate school in Londonderry, is a combined grammar, exercise-book, and reading-book, designed for pupils who have not been trained in English grammar, and ample in itself without other books as a preparation for reading Vergil, — the author whom Doctor Hime considers on the whole the best suited for a pupil's first acquaintance. The book is in two volumes, 8vo. London and Dublin: 1891. Price, 7*s*. 6d. The first edition appeared in 1878, and the author finds that twelve years' use establishes his claim that it saves time and money. This third edition is much enlarged and improved. The method in the main is that adopted by our American authors, Harkness, Comstock, Collar and Daniell, and others, a method which has been developed earlier and more fully here than in England, and which has not been much disturbed on either side of the water by "Ollendorfian" and "inductive" elements. Doctor Hime's book is intended to occupy about eighteen months. It is less progressive than our First Books. The opening chapter is brief, but its elementary quality is shown by the two first sentences: "Latin belongs to the Argan or Indo-European family of languages, which had its cradle probably somewhere in Central Asia. The members of this family are very numerous, including — besides Latin and Greek — Sanscrit, Zend, Celtic, Slavonic, and Teutonic, from which last, English is an offshoot." The following statement somewhat further on has peculiar interest to us: "The Latins originally formed *United States*, so to speak, having their *Washington* at Alba." The difficult subject of gender is treated in Chap. III. (pp. 31—39), in mass, and previously under the five declensions. The third conjugation, "the consonant or U conjugation," has for type verbs *rego* and *tribuo*. The exercises, test questions, and teaching hints, are less than our teachers would desire. The exercises especially seem meagre and fragmentary. In general, the book calls for much oral instruction, and for much unassisted memory work, as compared with our successful "Methods."

Most hand books for popular reading by medical men are works on therapeutics, and deal almost exclusively with symptoms and recipes from the pharmacopœia. If a book on how to beautify the complexion appears the supposition is that the author is advocating the sale of some patent compound for removing moths, freckles, etc. But when a world renowned, highly successful physician, sends forth a work under the title of HEREDITY HEALTH AND PERSONAL BEAUTY, we feel that this proper field for investigation and exposition is to be taken from charlatans and occupied by those whose utterances must carry weight and can be implicitly relied upon.. The author of the book is John V. Shoemaker, A. M., M. D., of Philadelphia, and his position in the ranks of the medical profession is unquestioned. Dr. Shoemaker treats of the regulative laws of life and growth and man's physical and spiritual place in nature, and in the chapters devoted to these subjects makes an earnest plea for accepting the theory of evolution. The following chapters relate to the sentiment and effect of the beautiful, and the care and treatment of all the parts of the body. The highest hygienic conditions are urged, and health is declared to be the prime source of personal beauty. The volume is one that can be safely and advantageously placed in the hands of every young man and young woman, and if its teachings are followed, not only health but grace and beauty will be the result. Published by F. A. Davis, Philadelphia.

A SHORTER HISTORY OF THE UNITED STATES, by Alexander Johnston, (New York: Henry Holt & Co. 1890.), is not an abridgement of the larger work by the same author, but a fresh presentation of the subject under a new arrangement of topics, with added excellence, to which the publishers justly call attention. The eleven chapters comprise 749 numbered topical sections, with convenient cross references. Each chapter closes with volume and page references to works given as supplementary reading, and with a chronological summary of the events noted in the chapter. The maps, of which there are many, both historical and special, are excellent and free from unnecessary detail. Appendices are added, comprising with other valuable matter, useful tabular views of the growth of states and cities. The volume is of handy size, and the letter-press excellent. In a book so good, it is to be regretted that there is found so much careless statement amounting at times to inaccuracy. For instance, section 178: "Washington seized Dorchester Heights, another hill much like Breed's Hill," which it resembles only in being a hill. No mention is made of the fact that Breed's Hill simply threatened the town, while Dorchester Heights made the town untenable by commanding the harbor and cutting off the British in Boston from communication with their fleet. Section 332: The Constitution captured the Guerière in lat. 41°, 30′, long. 55°, off the Grand Banks, and not "in the Gulf of St. Lawrence." Section 544: Jackson did not beat Pope, and Lee join him afterwards, but he captured Pope's depot of supplies at Manassas Junction, and then, having joined Lee, Lee beat Pope, while Hill, Jackson and Longstreet held Porter. Section 599: That "Sheridan had been known principally as a cavalry officer" is untrue. He was assigned to command the cavalry of the army of the Potomac when it was reorganized by Grant; he had been an infantry commander, except forty days' service as colonel of cavalry, till after the battle of Missionary Ridge in November, 1863. He did not "hold Five Forks against the previous assaults of Lee," but drove Pickett's division out of the intrenchments there while commanding his own cavalry and the Fifth Corps under Warren. Notwithstanding these and other inaccuracies, the book is valuable as a text-book for schools, and useful for reference to the general student of American history.

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY, AND LITERATURE OF EDUCATION.

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MORAL EDUCATION.[1]

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V.

CORRECT METHOD.

CORRECT method in moral education implies the proper course of procedure, on the part of the educator, in order to secure such activities in the child as will result in the formation of a good moral character. Moral education, viewed as a process carried on in the mind of the pupil, consists of these elements: — 1. Knowing. The pupil must know what he ought to do. 2. Feeling. There must exist in the pupil's mind such feelings as will constitute sufficient motives for doing what he ought to do. 3. Volition. The pupil himself must decide upon his own conduct. There is no moral element in involuntary conduct. 4. Action. The pupil must not only know his duty, be impelled to its performance, and decide to do it, but his decision must be so adhered to as to result in the actual doing of what should be done. Mere knowledge of duty, or knowledge and sentiment, without action, never result in moral character. 5. Habitude. Right actions, under the direction of a will influenced by right motives, must be repeated so often that the habit of acting in accordance with right motives will be fully established. It thus appears that the process of moral education is complex; and any method which

[1] Copyright, 1891, by Frank H. Kasson.

neglects to provide for the securing of all the elements involved in it is imperfect. More than this, the method is not correct unless the educator begins at the right time, uses the right means, avoids the wrong ones, works in the right spirit, and continues his work till the end is secured. It is the purpose of the present discussion to offer some practical suggestions bearing upon the correct method of moral education as thus conceived.

Moral education should begin early. It is a serious error to think a choice of influences under which a child is to live while young a matter of indifference. He may not be led by high moral motives during the first few years of his life; but he begins to form habits of action at a very early age, and these habits are either right or wrong. He either acts as he ought to continue to act, or he is forming habits of action which will need to be broken up and made to yield to other habits later on in life. The youthful mind is a field which always yields a plentiful harvest of fixed habits either good or bad. It is the part of wisdom, then, to preoccupy the ground with right habits of action. It is well known that early habits persist. Let the force of this persistence be in the direction of the right, and not of the wrong. Then, too, many desirable practices are positively pleasurable, if followed from early childhood, which otherwise are irksome or even painful. Habits resulting in personal cleanliness and health, like bathing and walking, and habits of politeness and courtesy, like thanks for favors received and deferential conduct toward the aged — all these would serve as examples. Moreover, early acts are often looked upon for a long time as standards of right, so little are we inclined as men to investigate the reasons for customary actions. Add to all this the fact that youth is emphatically the impressionable period of life, and we have ample ground for beginning the process of moral education at as early a period of the child's life as practicable.

It follows from what has already been said that, while moral education should begin with knowledge of what ought to be done, proper action on the part of the child should immediately follow. Implicit obedience to rightfully constituted authority is one of the first things to be insisted upon. The parent and the teacher are presumed to know the world better than the child, and to know, better than he, what course of action will ultimately be required of him in the world. Is it reasonable to allow the child

to follow his own unguided inclinations till he is old enough to know the reason for everything that is required of him? I believe in surrounding children with all good influences, and in treating them with all gentleness and kindness, but I believe, also, in the early training of them to do what parents and teachers, in their wisdom, decide that it is best for the children to do. Rule by love, but not by love alone. Use authority when necessary. Use motives that will secure the doing of what ought to be done. Many parents and teachers yield so much to the unreasoning demands of young children as to make of themselves little more than slaves, and to develop the children into a set of domineering tyrants. Better is the use of a little authority and the exercise of superior force. One of the first truths that a child should learn is the necessity of the immediate and unquestioning obedience of those who have the right to command.

Right action, even in the first stages of training, pre-supposes a knowledge of what is to be done. This knowledge should always be clear to the child before he is required to act. At first it is unwise to presume too much upon a child's memory. Before you use your authority, be sure that he knows both the thing to be done and your will. At the outset this is enough. But later on, and as fast as he is prepared to comprehend the results of his conduct, he should be made acquainted with the reasons for what he is required to do. The training to habits of obedience, and consequently to habits of right conduct, before the stage of advanced instruction in duty is reached, is often difficult, and the difficulty is sometimes increased through unskillful management. The first lessons in obedience should be taught through the application of superior force. At first direct a child to do what you can easily compel him to do. If he is told to come with his parent or teacher, he can easily be compelled to act accordingly; if he is diffident, and is told to talk before strangers, obedience cannot be so easily enforced. An intermediate step between the allowing of wayward conduct and the requiring of absolute obedience is a mild request to do a certain thing, leaving to the child the alternative of doing or not doing as requested. Let this be followed by directing the child to do what he is only too anxious to do. The habit of obeying prohibitions is best begun by obeying under compulsion. Tell a child not to go out of doors, and it is easy to enforce obedience. Much harm is often done by

arousing a child's antagonism and setting his will against that of the parent or teacher under circumstances where obedience cannot be enforced. It is a thousand times better for a child to do the wrong thing without opposition than after a conflict with and a victory over parent or teacher. Another good precept in this connection is this: never prohibit a child from doing what it is possible for him to do in spite of you. In such a case a request with a careful explanation of the reason for the request is the better course.

As children grow older, authority and that degree of compulsion which is implied in authority are to be more and more relaxed. More dependence is to be placed upon the self-directing power of the children themselves. Now comes the time for the beginning of systematic instruction in duty. This can hardly be too thoroughly done, if judiciously done. This instruction should cover the whole range of the child's duties to himself, to others, and to God. The power and consequent duty of self-protection and self-development should be carefully inculcated. The child's relation to life and his future manhood should be gradually unfolded. Too many children grow up with only a dim perception of personal responsibility for bodily health and strength, and for mental power. It is well to show them the relation between temperance and health, the value of regular bodily activity, and the dependence of broad knowledge and intellectual vigor upon systematic study. Even young children are influenced more or less by such truths; for they come to perceive more clearly that their future personal happiness is dependent upon temperance and industry. This instruction should not end till the child's attention is called to the duty of self-development as grounded upon the fact of the possibility of self-development. He should be made to feel that it is not only his privilege but his duty to make the most of himself.

The same line of thought should be pursued with reference to the child's duties to others. His instruction should include the benefit to himself to be derived from right treatment of others, but it should not end here. The fact of living in a world of mutual dependence should be presented to him as the ground for the duty of mutual helpfulness. The various ways in which help comes to him from others should be shown. He should be made to feel his absolute dependence upon others for food, clothing, and

shelter, as well as for all the means of intellectual and æsthetic enjoyment; and the consequent duty of reciprocal action should be taught. Many men and women lead aimless and useless lives because they have never been made to feel the duty of industry and the duty of rendering to the people in the world an equivalent for what they have received from the world. The world owes no man a living till he has earned a living by honest toil. Freely give because you freely receive.

A mistake is often made in deferring instruction in manners too long. Politeness is only the expression of what ought to be felt. The reflex influence of the proper expression of kindness is often underestimated. The mere act of saying, I thank you, has a tendency to fix the attention upon that for which the child should feel thankful. Respectful conduct towards the wise, the good, and the aged tends to produce the feeling of respect. A subdued tone of voice often does much to subdue the feelings. Graceful manners tend toward the production of refined sentiments. Polite, refined conduct should be cultivated from the earliest years as one means of culivating the heart.

Duty to God should be grounded upon a knowledge of God's goodness to the child. Mere authority should count for comparatively little. If God is known as the source of life, the giver of friends and every other form of blessings, the youthful heart will respond in thankfulness and love, and the child will be ready to obey the higher law of duty.

One great object of moral education should be the development of the power of self-restraint. Temptation to violate the laws of health, the laws of industry, the laws of politeness, and the higher laws of benevolence, and other forms of duty will often arise. So it becomes important that the child is habituated to hold himself in check whenever temptations appear. How shall this habit be formed? Certainly not by self-indulgence. That is to form the habit of yielding to temptation. It is no less obvious that the habit of self-restraint cannot be formed by constantly feeling the restraint of another. It is notorious that children who are the most tenderly guarded and constantly held in check, are often the most ready to yield to temptation when restraint is removed. The time comes sooner or later when temptation is to be met by the young man or woman alone, when not even one word of friendly warning or advice will be heard. To equip the child for

this requires practice in self-restraint. Can this come through the removal of all temptation? Is not the discipline of consequences sometimes needed? This principle cannot be carried too far; the life and health of the child must be preserved, and he must be kept from the commission of crime. But within this limit there is ample room to learn by experience. A child, who, by his rudeness and selfishness, has driven his playmates from him, understands better the necessity of politeness and generosity than he could ever learn from any amount of admonition and forced apologies. After such an experience he is ready to make an effort to hold himself in check whenever tempted to be rude or selfish. It is better occasionally to let the child taste the bitter fruit of experience than to keep him under perpetual restraint.

Do not set too high a standard for children's conduct. Ideals of action and character are always wrought out of the raw material of individual experience. The child's experience is not yours; consequently his ideals are not yours. The work of building up a high standard of conduct is a long one. This comes largely from a knowledge of the effects of conduct. Glimpses of the future, of the life of the future, and especially of the effects of this and that kind of life are the means by which children are to learn to set for themselves proper standards. Do not criticise the motives of children too severely. Whispering to classmates, doing the work for a helpless victim under examination, solving problems that have been assigned to another to solve, — all this may be done from the kindest of feeling and with the best of intentions. It is unwise to impute wrong motives in such cases till the results of the conduct complained of have been fully explained. Young men often do innocently what they themselves afterward condemn, from lack of the knowledge of the remote results of their actions. The conservatism of age often results from broader knowledge of consequences.

Avoid developing a morbid conscientiousness. Young children ought not to be kept constantly under the strain and depressing influence of a stern sense of duty. Children are to be trained for life, not for early death. Allow a free play of youthful spirits. Cheerfulness, joyous action, even boisterous action, — all these are just as necessary factors in the development of a sound, moral character as benevolent feelings or the sense of duty. It is quite possible to make young minds prematurely old.

Closely connected with what has just been said is the doctrine of restriction in regard to harmless pleasures. There are many games played by young people that have a strong tendency to develop manly power, such as baseball, football, cricket, tennis, and croquet, others, like dancing, which tend to produce graceful movement. These should not be prohibited, but rather encouraged within reasonable limits. The practice of music, painting, and needlework should be encouraged for their refining influence. The same may be said of attending theatres, concerts, and recitations; though this kind of recreation needs careful guarding and directing. Home games, such as checkers, dominoes, and cards, are good for recreation; and certainly they are much better played under the friendly influence of home than in secret and by stealth. It is not wise to measure all youthful actions by a rigid and sordid standard of utility. It is wise to give due opportunity for the exercise of childish inclination for sport and recreation.

Children should not be too much restrained and directed. Having decided what a child may properly do, let him do it in his own way and in his own time, as far as is consistent with his own good. If you tell him when to play, how to play, and when to stop playing, you frequently deprive his play of the element of spontaneity without which it is scarcely play at all, and put him into that frame of mind in which there is no desire to play. How many children are ruined in disposition by unnecessary restrictions. Freedom, within necessary limits, is as essential to a child's healthy development of body and mind as pure air and food. Under its influence his disposition is improved and his experience is productive of its best results. A child learns little by experience, if the experience is that of parent or teacher, and not his own.

Many young parents and teachers need to be reminded that much harm comes to children from an unwarranted distrust of motives. Accuse a child wrongfully of theft, lying, or deception, and you have done him an irreparable wrong. He becomes discouraged in his efforts to do right, he loses confidence in you, and you lose power over him. It is better to wait till proof is clear.

Never threaten a child. Nature never threatens; she only acts. Fear is a low motive at best, and should not often be resorted to. It ceases with the object that calls it forth. If a child is held in check constantly by fear of your actions, when you are removed

from him, or when he is removed from you, he ceases to be restrained. If you promise a child a definite punishment for a definite action, you often become embarrassed, because the conditions under which he offends may be so different from what you expected that an injustice would be done by keeping your promise. In such a case, it is much better for parent or teacher to confess his error, neglect the promised punishment, and grow wise from his painful experience.

One of the most powerful incentives to right conduct is example. Hold up before children the example of some of the world's great benefactors, founders of benevolent institutions, of colleges, and of schools; point them to those who have devoted their lives to the good of their fellowmen; show them what the great thinkers, the mathematicians, the inventors, and the scientific discoverers have accomplished; and you have done much to stimulate a laudable ambition to be good and great, you have created a motive that will endure. But the most powerful example of this sort is yourself. If you are good and true, if you are industrious and enthusiastic, if you are devoted to the best interests of those placed under your care, if you are all afire with zeal for the good of others, if you are a lover of all that is beautiful, good, and true, your immediate example will be a powerful stimulant, to any children with whom you are associated, toward the doing of all that is noble and good. Precept is powerful, but precept reënforced with example is more powerful. Let precept and example go hand in hand.

Strive constantly to form right habits of action. Among the desirable qualities of right action are regularity, punctuality, concentration of effort, honesty, perseverence, thoroughness, and truthfulness. Habits of physical and mental action that involve all these traits can be created only by careful and long continued effort on the part both of educator and pupil; for the efforts to be put forth in this direction must be often repeated. In addition to these traits there need to be developed in the child correct habits of feeling. He should be taught to care for himself habitually, to care for the good of others just as regularly, and to feel the influence of an omnipotent conscience with unfailing regularity whenever occasion calls. More than this, the habit is to be fully established of yielding instantly to the higher of two motives whenever motives conflict.

As a final word, the teacher is urged to be patient in conducting the work of moral education. The child is physically weak, intellectually weak, and morally weak. Moral power can no more be created suddenly than physical power. The body needs time to grow, the intellect needs time for unfolding, the moral nature needs still more time for development. The educator can no more create moral power, than intellectual or physical power. All he can do is to create the conditions under which the child's moral nature will best unfold; he must leave time and nature to do the rest.

THE WOMAN PROBLEM.

BY ELIZABETH PORTER GOULD.

TO ascertain the capacity, needs, and true position of woman is the problem which this age above all others, is striving to solve. Upon this solution depends, more than one is apt to think, the sure, healthful progress of the human race; for the destiny of woman is so intertwined with that of man that the one cannot be worked for without materially affecting the other.

Perhaps only those who fully realize the curse of man's dominion in heathen lands can truly feel the inconsistency of those in Christian lands, who, in still believing man to be the head, instead of companion of woman, reveal not only ignorance of the Creator's idea of her, but the essence of that despotism, so detested in heathendom, where the harem is an acknowledged necessity. This lingering despotism in the minds of civilized people is one of the chief hindrances to the proper development of the woman question, since nothing is so subtle or hard to reach as a refined selfishness. The solution of the woman problem needs not only the insight of the seer and the wisdom of the statesman, but the practical help of woman herself. Much is already due to the brave pioneer women, who by pen or voice, or both, have indicated new capacities and needs, and have found or prophesied for such a fitting place. The history of woman the past fifty years proves nothing plainer than this, including as it does the pen-work of a Mrs. Browning, a George Eliot, and a Harriet Martineau, the educational work of a Mary Somerville and a Mary Lyon, and the organization work — which in its scope has never

been surpassed — of a Frances Willard. To all this might well be added the work of Mrs. Bowker in Foreign Missions and of Lucy Stone in Woman Suffrage.

But the women alone are not to solve the problem. Neither is its solution in the hands of the men with all their experienced judgment, practical wisdom and chivalric hearts. It is in the hands of the people, both men and women, sounding the key-note of equal advantages to every human being bearing the seal of conscious responsibility. Only this conception of human nature can make apparent the breadth and grandeur of this problem and guard it from autocracy on the one hand and slavery on the other. What then does the problem imply? It implies that not woman-work alone, not man-work alone, is creation's end, but the coöperated work of both man and woman. "Male and female created he them and gave them dominion." It means that the boy and girl life of the true family must pervade the school, the college, the church, and the state life; for this is human nature, and such in the long run will assert itself, despite all man's obstructions. It means co-education in the fullest sense, that is the gradual elimination of boys' or girls' schools in the public school system. One city, having awakened to this fact, has so reconstructed her system that instead of separating upon entering the grammar schools, the boys and girls now work loyally together through all the years of public school life. The separation of the sexes during the ages has produced false and shallow ideas of chivalry and delicacy, has generated either a morbid or an exaggerated animalism at the expense of true sentiment, and has even given rise to evil suggestions which would have been avoided had the idea of the boy and girl life of the family been allowed a natural, healthful growth in every phase of human living. History has many facts and suggestions of a delay in human progress from this very cause. As a consequence, time and force will have to be spent in correcting the mistake. The difficulties attending such for this generation if conquered, will, however, make the labor of future generations easier and more fruitful.

The solving of this woman problem proves the founding of colleges for women to have been a necessity, not an end, and that in their increase as an end cannot be found the greatest hope or richest development of the nation. Wellesley and Smith, in Massachusetts, were a necessity for the higher education of her

women. So was Vassar for New York, and others in other states. But in Ohio, where Oberlin college was the pioneer in co-education, no distinctively woman's college was a necessity. Co-educational colleges became the rule. This is true of Michigan whose well-known University has been such a power for both sexes. The grandest result, possibly the only survival of this great wave of higher education for women, will be universities founded universally on a co-educational basis. Hence in this busy, complex age, when concentration of force is particularly needed, those states will be the wisest, the most far-sighted, who, like Ohio, organize on this line. All our oldest and best colleges must eventually yield to reason's call.

Both sexes will yet work together in all schools, colleges, and universities, as they do now in the departments of labor and in the home. What is the university but a large home wherein is brought to a focus the aspirations of youth — not boys alone, not girls alone — but of youth, for knowledge, happiness, and growth? Italy is a living example in this respect; for all of her nearly twenty universities are open to women. It is true that as yet not many avail themselves of the privileges offered. But the great fact remains that if the women of Italy are ignorant, it is not the fault of the universities. They have been generous and chivalric. They have been true to the principle of co-education, if never a woman joined them. The Swiss universities have long admitted women, Zurich having led the way in 1868. The Spanish universities are open to women. Sweden, Holland, Norway, Denmark, and others, have joined the procession. In marked contrast to all these are the universities of Germany and Austria. Some of our old valued colleges are creeping, if nothing more, in this direction. Columbia, like Harvard, has settled the matter for the present by an *Annex* for women. But the final opinion will be that of President Barnard who said, "I regard the establishment of an Annex as desirable only considered as a step toward what I think must sooner or later come to pass, and that is the opening of the college proper to both sexes equally."[1]

[1] Mr. Bryce in his study of our Commonwealth said, "The practice of educating the two sexes together in the same college tends in those sections of the country where it prevails to place women and men on a level as regards attainments, and gives them a greater number of common intellectual interests. It does not, I think, operate to make women either pedantic or masculine, or to diminish the differences between their mental and moral habits and those of men. Nature is quite strong enough to make the differences of temperament she creates persistent, even under influences which might seem likely to diminish them." *American Commonwealth*, p. 590, Vol. II.

If in the fullness of time a National University becomes a reality, the discussion even, of sex as a basis of admittance will lower its *raison d' etre*. Its foundations should be broad enough to hold easily all that is included in progress. For of all men, the Christian educator should have the far-seeing eye to lay foundations on eternal principles without fear or compromise.

Besides co-education, the solving of this woman problem means coöperation in every sense of the word; a concentration into fewer organizations of much of the force now scattered or even wasted in many separated ones. It will make possible the combination of societies which have had a legitimate birth and done a necessary work. The time is coming, is perhaps nearer than we think, when all this separate force of women will be more effective working in conjunction with that of men; when there will be one fine organization, officered and managed by both men and women, where now there are two, officered and managed by men and women separately. The women are preparing for this consummation in the experience which the formation of their societies has given them.

Until this idea of coöperation, in its fullest sense, is practically worked for by all the people, division of labor and force will be, as now, a necessity, rather than a choice. To strive for wise coöperation in all the various spheres of human living, is, therefore, the need of the hour, not only to advance, but to simplify human progress. Not until this idea is fulfilled will, or can, the woman problem be solved.

In the rush, excitement, and serious consequences ever accompanying the progress of new ideas, the thoughtful mind will be anchored to eternal principles. The underlying principles of this great movement of the nineteenth century — the woman movement — towards what is believed to be a new and finer civilization, is, that mental capacity, progress, and attainment in every human being, irrespective of sex, should have fair play towards securing the best welfare and glory of a Christian Republic.

THREE CENTURIES OF EUROPEAN LEARNING IN JAPAN.

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THE history of education in Japan has not yet received any adequate treatment by either foreign scholars or the Japanese themselves. In fact, the only serious attempt at such a history is the little volume of some two hundred pages prepared by the Japanese Department of Education for our Centennial Exhibition at Philadelphia in 1876. Next to this, and supplementing it, the most accurate information respecting Japanese educational topics is to be found in the annual reports of the Minister of Education, copies of which, transmitted to Washington through the agency of the United States Legation in Tokyo, find their way into print in the annual reports and the circulars of our own Bureau of Education.

It would be foreign to the subject in hand to go into any details respecting the development of purely Japanese learning, yet with respect to educational matters, there is one point of likeness between ancient and modern Japan that is too tempting to be passed by. Nothing has commended the Japanese to the Western world more than their marvelous eagerness to adopt our civilization, to learn our various languages, to import our philosophy, arts, and sciences, and, in a thousand and one ways, to model New Japan on European and American patterns. This spectacle of an entire nation sitting at our feet, eagerly conning the lessons we have given them and naively confessing the inferiority of their own civilization by their haste to cast it aside for ours, has been very gratifying to our vanity. It might, however, have a tendency to moderate our self-complacency if we remember that at best we are but playing the part of a second love with our neighbors of the sunrise. Twelve hundred years ago, speaking in round numbers, Japan was passing through a period of her history wonderfully analogous to the present epoch. She was sloughing off the old and taking on the new. Where now the eyes of her people are fixed on the West, they then were turned to the

kindred races of continental Asia. It is Europe and America today; it was China and Korea in those far-off times. The thousands of Japanese youth studying in our western schools had their ancestral proto-types in the no less numerous bands of ambitious students that sat at the feet of famous scholars throughout China. The Chinese classics were as fresh and as fascinating to the Japanese of the sixth century as are the writings of Irving and Macaulay to the Japanese of the nineteenth. Herbert Spencer is now the inspiration of the best minds of Japan, but neither he nor any other thinker can charm the nation into a more complete captivity to his teachings than did Confucius who has moulded Japanese thought for more than a thousand years.

The introduction of Western learning into Japan dates from the second half of the sixteenth century. Francis Xavier, the apostle of the Indies and the Far East, entered the country in 1549, and the remarkable success that followed his missionary labors and the labors of his immediate successors gave ground for the hope that Japan would soon become a Christian nation. For the training of a native priesthood, the missionaries established a theological college at Nagasaki. Here the Latin language, theology, history, and the scanty stores of mediæval science, as well as the barren philosophical subtleties of the schoolmen, were taught by instructors brought from Europe for that express purpose. Many were the students that flocked thither from far and near to learn what the "Southern barbarians," as the Portugese were called, had to teach. It was something new, and in Japan novelty is too often synonymous with popularity. Besides, the foreigners gave free tuition, food, and lodging to all who chose to come. But the career of the Roman Catholic missionary was short, and the days of his college were numbered. The world is familiar with the story of the overthrow of Christianity in Japan in the seventeenth century. With the expulsion of the foreign priests, or the martyrdom of the many who refused to go, and the relentless persecution of the native converts, all traces of the recently introduced Latin civilization were wiped out and its influence upon the educational policy of the Japanese people was brought to an end before any appreciable effect had been wrought.

Not so, however, with that of Holland. After the other European nations had been forbidden to enter Japan, the Dutch were

given a little fan-shaped island at the head of Nagasaki bay where, under restrictions and conditions of the most humiliating character, they were allowed to maintain a trading post.

Among the Japanese scholars who from time to time visited the Dutch settlement at Nagasaki were some who were impressed with the superiority of the civilization there represented over that of the East. These scholars considered it quite possible to obtain from books the secret of that civilization without endangering their country to foreign invasion, or even having any further intercourse than they then had with the West. But the government strongly opposed this scheme. The few young men who were permitted to learn the Dutch language, in order that they might act as interpreters between their own countrymen and the strangers, were forbidden to acquire anything more than a coloquial use of the foreign tongue. It was not until after 1716 that this restriction was removed and permission was granted to study the Dutch language from books. The *Shogun* Yoshimune, being deeply interested in astronomical and calendrical studies, was informed that the Dutch were well versed in these sciences. Having satisfied himself that these reports were correct, he commanded two of the most brilliant scholars of the time to apply themselves to the study of the Dutch language and literature. In the absence of grammars and lexicons their progress was slow; and although they continued their studies for years they never became proficient scholars. Kiotaku, who died as recently as 1803, was the first of his nation who can be said to have mastered an European tongue. He had the advantage of the labors of earlier scholars and carried his own investigations forward with such indefatigable perseverance that he became able to read Dutch works with an adequate understanding of their meaning. Kiotaku was a physician in the service of the Prince of Nakatsu, and at once, upon mastering the language, he began the translation of Dutch medical books into Japanese. To him belongs the honor of introducing Western medical science into Japan, and it may also be added here that from Kiotaku forward to the close of the first half of the nineteenth century the principal motive that Japanese scholars had in studying Dutch was to reach the stores of European medical science, of which so large and valuable a portion has been written in that tongue. It thus happened that the majority of those who cultivated the Dutch language were students of medicine.

There was, however, one brilliant exception. If all others regarded Dutch as valuable only for the scientific truths written in it, and learned it solely for the purpose of acquainting themselves with these, Moshitsu studied it for its own sake; and his accurate knowledge of it has given him, in the opinion of his countrymen, the well deserved title of the greatest master of a foreign language that Japan has yet produced. In 1807 difficulties with the Russians occurred in the northern parts of the empire, and in the following year the English appeared on the western coast. These two events caused great excitement throughout the country. The government determined to acquaint itself with the condition of these two intruding powers. Moshitsu received orders to compile an account of Russia and England from Dutch books. So satisfactorily did he perform his work that he was often thereafter called upon by the *Shogun* to furnish him with information respecting the various nations of the West. In 1822 Moshitsu was appointed translator for the government at a fixed salary. This event is historically significant as being the first time the Japanese government recognized the usefulness of foreign learning, and encouraged it with official patronage.

But the hour when Japan was to come out of the seclusion into which she had withdrawn herself for more than two centuries was at hand. War-ships of the various Western powers, cruising in the waters of the Pacific, were making frequent and unwelcome visits to Japanese ports. Even in Moshitsu's day, preservation of the ancient isolation of the empire had become an impossibility; and intelligent statesmen saw plainly that they would soon be compelled again to admit the hated foreigner to their shores.

It was the year 1853 and the seventh day of July that the American fleet steamed into the Bay of Yedo bearing gifts and greetings from the youngest of the western nations to an Emperor whose family, in unbroken succession for four-and-twenty centuries, had held the sceptre of sovereignty. The coming of Perry forms the turning point in the history of Japan; the American fleet was but the forerunner of the fleets of seventeen other nations; the walls of seclusion that the Japanese had built about their country had fallen; they were no longer a hermit people; and, for good or for ill, their fortunes were henceforth to be joined with the fortunes of other lands and of other races. Then there

came to Japan a period of internal storm and stress during which the very life of the nation seemed to tremble in the balance. The struggle between the *Shogunate* and the imperial party which had been growing in intensity for nearly a half century, precipitated by the disorder and commotion attending the opening of the country, was brought to an issue in the revolution of 1867-9. Fortunately for Japan, the cause of legitimacy came off triumphant; feudalism was overthrown, the Emperor restored to his rightful authority, and the nation fairly launched on its career of progress toward better things. As might be expected, the period immediately preceding the restoration lacked that tranquility necessary for successful educational work. The *Shogunate*, engaged in a hopeless battle against the rising tide of imperialism, was unable to establish an educational system such as the changed condition of the country required. The imperialists, on the other hand, were too absorbed in their struggle for supremacy to pay attention to anything else. It thus happened that so far as official patronage was concerned, not only did the study of western science receive no encouragement, but even Japanese learning languished.

Nevertheless much was accomplished. If the government was unable to promote the cause of educational reform, private citizens were ready with their money and time to save from failure the work already begun and to inaugurate new undertakings.

In 1858 a foreign medical college had been opened in Yedo. So successful did this prove, that in 1861 another was established at Nagasaki with a physical and chemical laboratory attached. It was at Nagasaki also that the first "foreign language school" was founded. Instruction was offered in Chinese, Dutch, English, French, and Russian. This was in 1863. In a short time similar institutions were established in all the large cities throughout the empire. Private schools of all kinds were opened wherever there seemed to be a prospect of success. Of the large number of institutions thus founded by private enterprise, the majority quickly ran their course and collapsed for want of funds. A few, however, have survived to the present day and fill an honorable place in the educational history of New Japan. Notable examples of the better class of such schools are Mr. Nakamura's *Doninsha* and Mr. Fukuzawa's *Keio-Gi-jiku*. Both of these are in Tokyo. The *Keio-Gi-jiku* is by far the most widely known and

ably conducted of all the private schools in Japan. A brief notice of the early career of this celebrated institution may not be out of place here, as it gives us a glimpse of educational methods in vogue in the Japan of a quarter of a century ago. Mr. Fukuzawa was one of a number of Japanese scholars who, shortly after the country was opened, visited Europe and America to study our social and political institutions. On his return to Japan he took home with him a large number of English books. Among these were works of reference, text-books on the various natural sciences, treatises on political and social science and works on moral and mental philosophy. A hall was secured and the work of teaching was at once begun. The *Keio-Gi-jiku*, as the new school was called, rapidly increased in the number of its students and its influence was soon widely felt. At first no effort was made toward the teaching of any foreign language. The instructor taking, say, a work of Herbert Spencer in his hand, appeared before a class composed of students whose ages varied from twenty years to fifty, and simply translated and expounded the text. The students were not boys needing drill and discipline, but men, the majority of them men of middle age, some of them able native scholars, many others government officials, — all of them ardent patriots determined to know what it was that made foreign nations so powerful. It need scarcely be added that Mr. Fukuzawa's school was a success. The hearts of teacher and pupil glowed with a kindred enthusiasm. They were enlisted in a common cause. Need it be wondered at that their devotion to this cause and the enthusiasm it inspired carried them triumphantly over the many obstacles that beset their path? Not a few of the ablest and most influential leaders in Japanese political circles today received their first lessons in statescraft in the *Keio-Gi-jiku* of of those troublous times.

But private schools no matter how excellent they may be, cannot fill the place of a public educational system, untrammelled by the limitations of sect or party, controlled by a central government, and supported by the state. Japanese statesmen were quick to recognize this, and scarcely was the restoration an accomplished fact when the imperial government took steps toward a reform in the national educational system. Its earnestness in this work can be best judged from what it actually performed. In March, 1868, just six months from the restoration, a school for the promotion of

the knowledge of civil affairs was established in Kyoto. The object of this institution was to train the court nobles for the better discharge of their official duties. In May of the same year the foreign language school at Nagasaki was taken under government protection, and in the following month all the educational institutions in Yedo fell under the same control. A school of science was opened in Osaka and a temporary military college in Kyoto. In September, an imperial edict was promulgated ordering the establishment of a national university. This edict contained the following significant declaration: "Foreign learning, both Chinese and European, must be made to subserve the interests of Japan." The condition of native learning was thus dwelt upon in another proclamation issued a few weeks later: "Japanese learning has of late greatly declined, so that the honor of the country in its relations with foreign nations has been materially prejudiced. It is now the intention of the government to take measures to revive Japanese learning, and it is earnestly desired that every one, by diligent study and by encouraging sound scholarship, should aid in this work."

In 1869 the seat of government was removed from Kyoto to Yedo, and the name of the latter city was changed to Tokyo. The work of reform now moved forward faster than ever. The same year the University of Tokyo was established and the control of all the public schools in the empire was vested in its board of managers. This, however, was but a temporary arrangement. In July, 1870, the entire educational machinery of the nation which was founded upon ancient Japanese models was abolished, and a department of government was created called the *Mombusho*, or Department of Education. The University of Tokyo ceased to have a voice in the control of the schools established by the state, and was relegated to its proper place as the head of the national system to which all other schools sustained the relation of preparatory *gymnasia*. The country was divided into educational districts, each provided with one school of advanced grade and numerous elementary ones. But this was only a small part of the work contemplated by the *Mombusho*. Normal schools for the better training of teachers, commercial colleges for instruction in business, law and practice, medical colleges, agricultural colleges, schools for the study of Chinese, and others for promoting the knowledge of Japanese history and the native language

and literature were established wherever their services seemed to be demanded and as quickly as circumstances would allow.

Things did not always move as smoothly as might have been desired. The establishment of so many schools for the study of foreign languages necessitated the hiring of an army of foreign teachers. Many of these were of a very indifferent sort. In their innocence of anything to the contrary, the Japanese believed that any foreigner was quite capable of giving them instruction in his native language. It was no uncommon thing for some swaggering sailor or profligate adventurer to figure as professor of this or that foreign language in a Japanese school of twenty years ago. The short comings were not, however, all upon the side of the foreign teacher. The educational department itself suffered from inefficient management; and the ignorance of its officials was more than equalled by the high conception they formed of their own ability and importance. But this was a trivial matter compared with the chronic tendency to change which, for the first fifteen years, characterized the policy of the *Mombusho.* A seemingly satisfactory arrangement would be arrived at, the country would be divided into districts, the number and character of the schools in each determined, courses of study laid down and everything evidently moving off as well as could be desired, when suddenly another proclamation would be issued, the existing system would be abolished and a new one established. Doubtless, constant expansion of the department's work called for modification, but it remained a cause for regret that in so important a matter the Japanese should give evidence of such instability of purpose.

It is now, however, five years since the last re-adjustment of the educational system took place, and there is some ground for hoping that a final policy has been arrived at. Under the present arrangement the Japanese government, it may justly be said, has made ample provision for the education of the rising generation. Indeed, theoretically, Japan's educational system is much superior to our own, and it would be difficult to suggest an improvement to what now so nearly approaches the ideal. An admirable system of primary schools affords an elementary education to the children of every class. Attendance upon these schools is required between the ages of six and fourteen years. Above the primary come the "ordinary middle schools," corresponding in

scope of instruction to the better class of our high schools. The graduate of the ordinary is admitted on his diploma to the "high middle school." Of these there are seven, distributed at convenient points throughout the empire. The course of study in the high middle schools, or middle colleges as they are more generally called, extends over five years and embraces a lower department of three and a higher one of two years. The work done in the higher course is of about the same grade as that usually required of students in the freshman and sophomore classes of the average American college. From the middle college the student passes on to the Imperial University located in Tokyo. This university is divided into colleges of law, medicine, engineering, literature, and science, each with a separate faculty and a course extending through three years. Above these colleges, again, is the University Hall, or the graduate department of the national educational system. Here advanced students may pursue original investigations in the several departments of knowledge as candidates for higher degrees.

PRIMARY EDUCATION IN NEW ZEALAND.

BY ARTHUR INKERSLEY.

II.

ON Saturday mornings, probationary and pupil teachers have to attend classes at the training college, where instruction is given in arithmetic, history, drawing, singing and drill.

The correction of the home-work is done, as has been said, by Probationers, and is carried out with an almost absurd minuteness. Every misshapen letter, uncrossed "t," or undotted "i," is to be corrected; every misspelt word, or ill-constructed sentence to be re-written, preserving the original form as far as possible. This is done, not so much because it is ever imagined that the children will minutely examine every correction, as in order that the parents, who are the bugbears of the head teacher's existence, may have no possible ground for complaint. All remarks made in the books are to be written in a copy-book hand, to convey to the parent's mind the idea of good writing. It never seems to occur to a parent that a man who daily corrects perhaps

seventy exercise books, and on certain days a large number of maps as well, will of necessity leave some errors uncorrected, or make some unnecessary corrections. In schools where the head teachers have a taste for science, quite creditable collections of scientific apparatus have been gotten together, and lectures, accompanied by experiments, are, to the great delight of the children, given once a week. Occasionally, too, an enthusiastic teacher makes a collection of geological or mineralogical specimens, which serve as a basis of illustration, and to awaken a taste for such matters in the minds of the children.

Instructions are issued by the Board for the guidance of teachers. In these books of instruction are found notes on the way in which the inspector of the district desires the various subjects of the school course to be taught, also hints on organization, discipline, etc.

All hasty infliction of corporal punishment is to be avoided, and pupils are on no account to be struck on the head.

Teachers are recommended to do all they can to render their rooms attractive by flowers, pictures, engravings, and other decorations. In several schools, plaster casts are put up on brackets, also pictures of famous men, notable buildings, and other things calculated to awaken a child's mind. In one school teaching by pictures is almost elevated into a system. The illustrated papers are regularly overhauled and the pictures cut out and sorted according to subjects. They are then backed with stout paper and put away in portfolios labelled under headings, such as America, Canada, Australia, Mining for Coal, Hospitals, Politicians, Famous Soldiers, Historical Buildings, and so on. These pictures are then brought out to give life and interest to history and geography lessons. Sometimes the walls of a school-room are almost entirely covered, up to a convenient height, with pictures. They are also used in the following way: A set of pictures illustrating, say, the work of life-boats, is put up on a blackboard in front of the class, usually an upper one. The subject is then explained by reference to the pictures, and the children are required to produce a composition of their own on the subject, having the pictures before them.

They are also exercised in the writing of business and other letters. For example, a class will be told to bring next morning a letter of application to a merchant for employment in his office,

or to a board of education for employment as a teacher. These letters are to be written in proper form on a sheet of note paper, and enclosed in an envelope properly addressed. These are then corrected by the probationer, and commented on by the teacher, who gives out to the class what he considers a suitable model for such a letter. We remember being somewhat amused at one teacher, who was giving the class a model letter of acceptance of an invitation to dinner at seven o'clock, an hour at which not ten people in the town dine once a year. He directed the boy accepting the invitation to say that he would put in an appearance at his host's house at 6.30, apparently from a desire to remove all anxiety about his punctuality from the mind of his entertainer.

In another school great attention is paid to map-drawing, and the children are taught to color their maps suitably with well-chosen washes of color. We have seen a map with several hundreds of names in it so well done by a girl of thirteen or fourteen, that at a little distance it could not be told from an engraved map. These maps are sometimes varnished, framed, and hung up on the walls of the school-room, to show the other pupils what may be done by perseverance, and also to do honor to the map-drawer.

The number of children in the higher, i. e., the fifth and sixth standards, is not large in most of the schools, and yet these standards require special teaching. It has, consequently, been suggested that ordinary schools should end their work with Standard 4, and that all the children in certain districts wishing to go on to the higher standards should be drafted off to one school, where they could have higher teaching by more highly educated teachers, and where a more special attention could be paid to their requirements than is possible in many of the smaller schools, especially in those where a teacher is single-handed. This suggestion has been debated with great vigor, both by the press and the profession, and it is not improbable that, eventually, something of the kind will be done.

Liberty to inspect the work of a primary school is usually willingly accorded to any visitor interested in the work, and wishing to gain an insight into the methods of teaching in vogue in the colony. Many pleasant chats on school matters have we thus had with teachers whom we almost invariably found very ready to explain their methods and processes of teaching, and to stay after

school was over and discuss educational matters generally. Sometimes a teacher who has lately been harassed by an over-strict or fussy inspector, will gladly unburden himself to a sympathetic visitor.

It seemed to us that the school inspector in the colonies is more likely to be hard upon his subordinates than his congener in England. The school inspectors in England (of whom the late Matthew Arnold was one), are men of high culture and university distinction, who have had no practical acquaintance with primary schools until they are appointed inspectors. In the colonies, inspectorships are prizes for successful primary school teachers, who, knowing every detail of school life from hard experience and having a reputation for sharpness and vigilance to make, are much more likely to show no leniency to faults or weaknesses than the man of broad culture trained up entirely outside of the somewhat narrowing influence of the state and normal school.

Among the many schools which we visited, we were refused admission to see the work in only one instance, the head teacher saying that he felt sure that his assistants would be disconcerted at such an inspection. We apologized, and excused ourselves of any desire to intrude, whereupon he became very pleasant, and gave us many details of his own career, which was a pretty long and varied one, for it began in England when he was fifteen years of age, and was continued in Australia and in New Zealand until then, and covered a period of thirty-five years. He expressed himself strongly on the system of employing probationers, and especially against the manner in which they were selected in the early days of the colony, when there was so great a dearth of men able and willing to teach that the Boards had to accept almost any man of fair education who offered himself. Thus, many "loafers" and broken men, and even drunkards, were taken into the service, and now, having grown old, could not well be got rid of. However, this is not the case now, for in almost all, if not in all the educational districts, there are many certificated teachers seeking employment. In many respects the work of a country teacher is harder than that of a teacher at a city or town school. In the country a teacher may have to take, single-handed or with the assistance of a pupil teacher, and of a sewing teacher on one afternoon of the week, entire charge of a school, containing children in all the standards up to 4 or 5, and a pre-

paratory class. It requires some skill to arrange a time-table in which justice shall be done to all the children under such circumstances as these.

One thing which strikes a visitor at a city school as somewhat unprofitable to children who, of course, know no language but their own, is the lesson on the derivation of words from Greek and Latin roots. They are taught, for example, that "Monarch" comes from two Greek words, "Monos," alone, and "Archo," I will, and "heterogeneous" from "heteros," different, and "genos," kind, and so on. Now, as these words belong to a language of which the child certainly, and his teacher almost as certainly, does not know even the alphabet, it seems like an attempt to produce the show of knowledge without the reality, and we think that a pretty general feeling against it exists among teachers. In geography, too, children seem to be expected to grasp the difficult notions of mathematical geography too soon. It is, undoubtedly, the hardest part of the subject, for the simplest explanations which can, consistently with accuracy, be given of meridians, parallels, longitude and latitude, longer and shorter axis, and so on, involve notions which require a somewhat trained mind to understand. Yet all this, and a good deal of physical geography as well is required from Standard 5 children. As an illustration of the difficulty of getting accurate ideas of mathematical geography, we may cite an answer given by a training college candidate to a question on degrees of longitude: "Degrees of longitude are not the same length all the world over, because the world is not flat, and some meridians, in going from pole to pole, have to pass over high mountains, and others have to go over flat, level parts of the country, or else down deep valleys or lakes."

One subject which struck us as a very suitable one for primary schools, and on which it is possible for a well-informed teacher to refer to many facts of daily use and importance, especially to children living in the poorer parts of a town, is the subject called "The Laws of Health." Under this head a quantity of information is given upon foods, their use, qualities, and preparation: respiration; clothing; ventilation and other kindred matters. One of the most attractive schools in the North Island of New Zealand, is the Beresford street school, Auckland. The school building is like those of other primary schools in the colony, built

entirely of wood, but being constructed according to more recent plans than many of the others, it is loftier and more airy. The rooms are large, lofty, and very well lighted by numerous windows provided with green venetian blinds. The building is surmounted by an ornamental bell tower. The rooms are almost all upon the first floor, though, as the ground slopes rapidly away on one side, there is on that side a basement story, where the younger children are taught. Generally the principal rooms used for teaching are on one floor, and reach from that floor to the roof, thus securing plenty of cubic space for air, and avoiding the necessity for any tramping up and down stairs, and the noise and dust consequent upon this.

In the particular school to which I refer, there is a marked cleanliness and neatness pervading everything; the desks are scrubbed, and the brass tops of the ink-pots polished brilliantly.

The manner of the head teacher is very quiet and attractive, and peace seems to reign in the school. Of course, there must be some power of coercion somewhere, for the colonial youth are not very amenable to discipline, but it seems impossible to imagine a large school carried on with less friction, or appearance of forcible measures.

The head teacher is the chief advocate of the system of combining into one school in each town the children who have passed Standard 4, and wish to go to higher standards. He told us that there were throughout the colony 1,600 children in Standards 5 and 6, as against 20,000 in the other standards, that the teaching was costly, the subjects pretentious and beyond the needs of the children. He considered the derivations of English words from Greek and Latin roots referred to above, quite useless, and also the extraction of square and cube roots, all of which, he thought, fell within the province of the secondary or high schools, with which the colony is well supplied.

His opinion was, and is, that the work of the primary schools should stop at Standard 4, and then be taken up by the secondary schools.

The remarks made in an earlier portion of this paper will show that with these views we are disposed to coincide.

We have not here touched upon the secondary schools or university colleges of New Zealand, as the limits of this article do not admit of our so doing.

POLITICAL ECONOMY IN SCHOOLS.

PROF. W. E. BURCHILL, DENVER, COL.

MORE than one hundred and fifty years ago, Bishop Butler, the author of the famous Analogy, a man of great reasoning power, of accurate and logical habits of thought, put forth the opinion that no form of government could have a permanent existence not possessing as essential parts a monarch and a state church. For a century this country has seen neither, and the permanency of our form of government is unquestioned. That the judgment of Butler was not hasty or inconsiderate we may feel assured; what then are the social factors which have rendered our form of government possible, and, being absent in his time, allowed so great a thinker to form so erroneous an opinion. These factors are probably numerous, but by far the most important is the universality of education. So long as the advantages of education are shut off from the many, the responsibilities of government must rest on the shoulders of the few. A democratic form of government is possible only to an educated people. Democracy with ignorance means anarchy.

In this country then the public and private schools must be regarded not only as possessing a high social and moral value, but as being of the first importance politically, in rendering possible and giving permanency to democratic institutions. The question here proposed is: Do the schools of this country, public and private, recognize the enormous power they possess, and do they endeavor to exercise this power to the end of securing the best government possible, and of promoting the material well-being of all classes?

Let us see: —

As civilization advances, and population increases, as the machinery of government becomes more and more intricate, and the adjustments and relationships of its parts more complex, the study of the laws and principles by which society is held together becomes more and more important. In the more primitive state the relations existing between men are so simple and obvious as not

to require investigation; and even after some progress is made, the sparsity of population, and the ease with which the limited wants of the people can be satisfied do not as yet necessitate an investigation of the laws which govern the production and distribution of wealth. But as progress still goes on; as invention and discovery give new powers to man, and increase the powers he already possesses, causing the forces of nature to do work formerly done by muscles and sinews; as the division of labor greatly increases production with diminished toil; as distinct classes arise, such as agricultural, commercial, manufacturing, and professional; as the necessity is created for an army, navy, and police force, for judges, lawyers, and governors; the great number and variety of the parts of which society is composed, make it more and more difficult to preserve the whole in equilibrium, and gives rise to a system of laws and principles known as political economy.

There is no branch of education, beyond the most primary, so necessary and suitable for universal study as political economy. It is necessary, because it is ruinous to the interests of society to leave it to the investigation of specialists. It treats of matters which affect selfish interests, and its slow progress in the past is mainly due to the fact that, where its bases are true and its investigations are accurate and searching, it discovers wrongs that need redress, and unjust institutions which for generations were considered just and which antiquity has almost made sacred; prejudices are aroused and the economists, often startled at their own conclusions, seek less radical solutions. Investigations in astronomy seldom arouse prejudices, at least not in our day. Discoveries in electricity or optics are not antagonistic to selfish interests. Advances in mathematical knowledge do not lesson the unjust gains of a great and powerful class. That science which often traces want and misery, enforced idleness and brutalizing conditions, to monopoly and privilege is not likely to make progress till it has become popularized.

Furthermore, it is suitable to general investigation. Before one can commence the study of optics, electricity, astronomy, etc., he must have acquired a considerable amount of mathematical knowledge, and possess, or have access to, a large number of costly instruments. In the correct study of geology, botany, or zoölogy, many technical expressions are employed, and excursions must be

made to collect specimens or examine phenomena. The study of chemistry requires a complex system of symbolical writing in order to formulate the changes which take place in the various reactions. But the study of political economy requires none of these things, Its terminology is, with slight limitations of meaning, that of ordinary language. The phenomena to be observed are within reach, are, in fact, continually presented to us, and the results arrived at by deductive reasoning can easily be verified by comparison with the facts of actual experience, introducing or eliminating conditions which may or may not form factors of the investigations.

"How shall we be fed," "wherewithal shall we be clothed," are the questions with which political economy attempts to deal, and since food and clothing are the first requisites of life, political economy is the basis of social science; as well might we try to build a house without laying a foundation as to endeavor to arrive at just conclusions on questions relating to the latter without a knowledge of the former. Therefore in this land of political freedom, with its manhood suffrage, it is of the first importance that every citizen should qualify himself for the right employment of this freedom, for the intelligent and conscientious exercise of this suffrage, by making himself acquainted with the fundamental principles of political economy. To enable him to do this should be a chief object of our educational institutions.

Some boys are fitted for a profession; some for an agricultural, some for a commercial existence; but all are to be citizens, all are to have a share in the government of thier country; hence while each is being taught those special branches that bear on his profession, all should be taught that common branch which bears on the duties of true citizenship. How often does one hear in discussions on such questions as "the free coinage of silver," "the protective tariff," "the issue of paper money," arguments put forward which would never have been heard if their authors had been acquainted with the most elementary text-book on political economy. Does not the exploded fallacy known as the "Mercantile Theory," turn up in the arguments not only of public discussion, but on the public platform, in the newspapers, and even in legislative assemblies? Is it not strange that men will give opinions off-hand on economic questions, who would hesitate to express an opinion on the undulatory theory of the propagation

of light or on the nebular hypothesis, though of the latter questions they know considerably more than of the former? Nay! will not even a senator know something of the rings of Saturn, and the precession of the equinoxes, though happily both are beyond the sphere of his legislation, and yet have a very indistinct notion of the "incidence of taxation," or of the law of "supply and demand" as applied to international exchange? Are we not constantly reminded of the words of Oxenstern addressed to his son: — "Go see for yourself, my son, with what little wisdom the world is governed."

The study of political economy tends to the fostering of a healthy public spirit. In most other studies the object sought after is the direct benefit of the indivdual, and from his very school days the boy learns to feel the power of that keen competition, which is said to be the life of trade, but which unbridled and without the counteracting effect of sympathetic coöperation and interdependence becomes the merciless Juggernaut of modern civilization. All studies having for their aim the fitting of the individual to play a successful part in the struggle for life, induce to some extent a spirit of egotism; but that study which treats of the well-being of the whole people, which makes the class, society, the nation its unit, which endeavors to grapple with social evils and to solve the Sphinx riddles which modern civilization presents, is in its essence altruistic. There is no branch of secular education which better fits a man for true citizenship and creates a juster appreciation of his duties and responsibilities towards his fellowmen. The boy cannot be too early taught the lesson that he does not live for himself alone, that real happiness is incompatible with selfishness: that just as the true knight in the days of romance went forth to overthrow oppression, quell disorder, and suppress abuses, strong in the approving smile of some fair lady; so the knightly spirit in all ages, setting aside selfish indulgence will find its fullest development in striving for the abolition of human injustice, and the amelioration of human misery, and even a goddess shall smile upon his efforts.

To secure these ends political economy should be taught in our high schools and academies, and in all schools where pupils of sufficient age and advancement for such study are found. The subject can be presented in an interesting manner, avoiding as far as possible contentious questions, viewing present political issues

not from the standpoint of the politician, but from that of the philosophic student, our aim should be to fit our pupils to form rational judgments in accordance with economic laws. Employing only elementary text-books, a clear knowledge of definitions, of established theories, and first principles might be acquired by a boy which would be great assistance to him all through life.

In the attention given to rhetoric in our schools we manifest our appreciation of the advantages of accurate and graceful expression of thought, but do we sufficiently appreciate the advantages to be derived from training our pupils to acquire accurate and logical habits of thought. How forcible is that sentence of Bacon: — "Words are the counters of wise men but the current coin of fools." Does our school system tend to the production of those minds to whom words are current coin? What good to fit a youth to stand in public assemblies, in the legislature, in congress, or to sit in the editor's chair and eloquently express his thoughts, if those thoughts are fallacies which an elementary text-book would have shown him as exploded fifty or a hundred years ago. To some extent, either in public or in private, most men are called upon to express opinions on economic questions, and all at the polls to form some opinion at least, which is expressed in their vote; the irresistible force of public opinion is the resultant of the concurrent and non-concurrent forces of individual opinion; what a benefit then to the cause of good government if every man were trained to think intelligently on social questions, and furnished with those fundamental truths which are the instruments, by means of which correct judgments may be formed.

It has been fashionable to sneer at political economy as "the dismal science," a philosophy of despair founded on an arithmetic of ruin, and to relegate the study of it to the inhabitants of Jupiter or Saturn, to ignore its teachings, and legislate in direct antagonism to its principles; but it is no longer safe so to act. In these days of overstocked labor markets, of commercial crises, and industrial depressions, it is folly to trust in fortuitous circumstances to produce social well-being and content, or in the policeman's baton to answer communistic arguments. Let us rather recognize the might of thought by the dissemination of economic truth, and see to it, that our boys, whether prepared for professional, commercial, or industrial pursuits, are all fitted for the exercise of the duties and privileges of citizenship.

TEACHING, TRAINING, INSTRUCTING AND EDUCATING.

BY Z. RICHARDS, WASHINGTON, D. C.

THESE are terms, often used synonymously, and interchangeably; but as each of them has a specific meaning, scholars and educators should be agreed as to their meaning and use. Carelessness and want of precision in the use of words and terms, have very much to do in causing apparent differences of opinion, and in provoking controversies. The custom of classifying such words in our dictionaries, as synonyms, tends to increase the careless use of them. But the etymology of the above terms indicates that each of them has a special signification, closely related in logical order, which seems to mark a fully developed human character in four processes or stages.

The first stage is represented by *teaching;* which may be defined as the work of imparting a knowledge of facts, things and ideas to those who are ignorant. The intelligent teacher must, consequently, *know* what he intends to teach. He may impart knowledge *directly* and *indirectly: directly*, by presenting to the perceptive, or knowing faculties of children the real objects themselves; or their symbols in pictures or words; and, *indirectly*, by influencing them to acquire knowledge through their own self-activity; or by observation and language; thus helping the pupil to become his own teacher. Knowledge thus acquired, becomes more practical and permanent, and secures the best disciplinary results. Teaching, however, should never be done by the "pouring-in process"; cramming is not teaching. All knowledge should be so taught, that, so to speak, it may be thoroughly masticated, digested, and assimilated; and, thereby, fitted for its specific and legitimate use. That teaching only, is valuable, which imparts such a kind, and amount of knowledge, as is necessary to develop and perfect human character. As knowledge is to the mind what food is to the body, the kind and quantity of it and the condition of the mind must demand the special care and consideration of the teacher and parent, until the character of the

child is so completely developed and matured that he can meet the demands of life from his own resources.

The second stage of character formation is *training;* which may be defined as the giving of such an impulse and direction to the faculties and habits of the pupil, while being taught, as will make it easy and natural for him to use all his powers in accordance with wise, human, and divine laws. Good training is not, therefore, the same as good teaching. The pupil may be taught all the facts and principles recognized in the whole curriculum of the sciences, the arts, and literature, and yet lack *good training* — really the most essential element of human character. The wise man said, "*Train* up a child in the way he should go; and when he is old he will not depart from it." He did not say, "fill his mind with knowledge, or with the contents of books." To "train up a child in the way he should go," implies the formation of correct habits, of acquiring knowledge accurately, of thinking accurately, of speaking accurately and truthfully, and of acting correctly, which are essential requisites of a true character. It should be the leading purpose of every true teacher to so train his pupils, that they will habitually and purposely exemplify the best elements of a true character. Good training, therefore, consists in so directing and disciplining the mental and moral faculties of children, that they will always act in harmony with truth and right; without reference to the amount of knowledge acquired. "Knowledge puffeth up," we are told; of which, we have too many disgusting proofs; but good training makes one truly humble. The true teacher will always be careful, after imparting knowledge to his pupils, to show them how to use it; and what it is useful for, and the importance of actually using it. This may be called good training.

The next, or third stage of character building, is *instruction.* This consists in so building up the pupil's character, by the use of knowledge and correct training, that it will contain every essential ingredient, in harmonious development. A properly instructed person will not be a one-sided person, nor a hobby-rider. It will be difficult to say which element of his character is of the most value and importance; for each is essential in its true place. As in a material building, every stone in its foundation, every beam and pillar, every spike and pin, every tenon and mortise, is all important in its true place, and so essential,

that, without it, the superstructure would be essentially defective; so in character-building, every element of a true character should be of the best kind, and perfectly fitted to its proper place. Whoever, in the building up of his character, makes mathematics a specialty, or language, or history, or art, or any one branch of study to the exclusion of others, is not properly instructed. His inner, as well as outer structure, is incomplete. Perfection in only a single branch of human culture, reminds one of an ordinarily constructed hovel, with a tall steeple, or an imposing colonnade in front of it. Sound instruction is, therefore, the building up of the *inner* — the moral and the intellectual being of the pupil, completely and harmoniously.

Finally, *educating* is the *completing*, the *rounding up* of the human character: the drawing out of all its capabilities, so as to make the true man, or woman. The educated man has been so *taught*, so *trained* and so *instructed*, that all his powers, or any one of them, can be called into immediate use, successfully, whenever there is a demand. This is the real work of our probationary state, for which our Creator permits us to live. Unfortunately, very few succeed in acquiring a complete education, even though they may pass through the high school, the college and the university. A diploma is no guarantee that its receiver is an *educated* man. To become such, however, should be the end and aim of every human being.

MEDIÆVAL ENGLAND AS SEEN IN HER BALLADS.

BY LAURA SAUNDERSON HINES, A. M.

"LET me make all the ballads and I care not who makes the laws of a nation," said a wise man. The history of the ballad is the history of the beginning of literature in every nation. On the banks of the Clyde as on the shores of the Ægean, the bard sang his story accompanying it with the music of the harp or an imitative dance. Even in the Hebrew records we find Deborah chanting a triumphant ballad over the death of Sisera; her

boasts, her fierceness, her scorn of the baseness of her enemies, her taunts at their sufferings, vividly portray the spirit of her age. In England this primeval poetry has a rude and original cast of genius. The thought is expressed in simple language. The singer tells his story in so straightforward a manner, that we are forced to believe it true. The subject is always well handled, whether it be war, heroic deeds, domestic tragedy, superstitions or romantic love. These early ballads are the utterance of a people struggling to express their new-born thoughts. They were written for a people still one in their interests and tastes, before rank and education had widely separated the different classes. Caste lines indeed there were but the tie that bound chief and man, prince and follower, was a strong one, and doughty deeds made a brave man the equal of a king.

The ballad is as interesting to the student of literature as the Egyptian hieroglyphics to the philologist; for as slowly but surely the symbolic signs became phonetic, then alphabetic, so the ballad, crude in thought and expression, was a first step in the grand march toward that triumph of thought and reason — the literature of the nineteenth century. In itself the ballad may not properly be classed as literature. Though its style is refreshingly simple and the words are "folded as closely as possible round the things meant," even with dramatic force, yet the literary critic must condemn the vain repetition of thought, the loose and trivial methods of composition, and the many cheap phrases that serve on all possible occasions. The ballad is chiefly interesting as containing the germs of all a nation's literary greatness. As a germ, the ballad repays careful study. The Minnesinger's love of nature, his delight in romance and his longing for a higher ideal give us glimpses of the thought that produced Goethe and Schiller. The fanciful fables, allegories, and love songs of the Trouveurs show the French ever prefered fiction and fun to fact and common sense; a preference that attains its highest expression in that master of the comic — Molière. The Spaniard's delight in the wonderful, as portrayed in the early romances, culminates in those fanciful wonders, the romantic dramas of Calderon. So, too, the English ballad, like an uncut diamond, hides beneath its unpolished surface, the passionate energy of Byron, the martial ring of Scott, the humorous pathos of Burns and the dramatic power of Shakespeare.

The musical possibilities of the language are more than hinted, in the earliest of English songs. Listen and judge for yourself:

> "Sumer is icumen in.
> Lhude sing Cuccu:
> Groweth sed and bloweth med,
> And springeth the wde nu.
> Sing Cuccu.
> Ane bleateth ofter lamb,
> Lhouth after calve cu;
> Bulluc sterreth,
> Buche verteth,
> Murie sing, Cuccu,
> Cuccu, Cuccu,
> Well singes thu, Cuccu,
> Ne swik thu nauer nu."

Still the cuckoo sings!

These ballads are valuable to the historian, as they furnish a detailed account of the life of the people. A ballad takes out a bit of the real past and presents it to us as a type of the whole. We listen, we learn. We must not imagine we can make out the whole picture because we have a few pieces of the original mosaic; but the pieces are precious heirlooms and give us broad hints of the true outlines of the old picture. The feasts in the castle, the contests on the green, the warlike valor of the men, the beauty and skill of the women, the customs and laws of the nation, these the ballad gives us; sketches, but they are sketched in the warm colors of nature. From these we gain our best and clearest knowledge of a nation's infancy.

The history of England is more clearly printed in ballads than that of any continental nation. The English ballad was the outgrowth of English thought. It was created by the people for the people. The gorgeous imagery of the Welsh, the passions of the Minnesingers, the religious enthusiasm of the Scalds is wanting. We hear of wars and rumors of war, deeds of prowess, brute force and physical strength. In the earliest compositions of a nation we trace the natural bias of the popular mind. In the old Saxon writings, we find the warrior spirit predominant. The brave men rejoiced as the "ring mail sang aloud a greedy war song," they gloried in the "sparkling blade," and the "sound of war weapons." Even the pious Caedmon revels in the description of battles: "The javelins were loud, wroth the bands of slaughter, the sad fowl sang amid the dart-shafts, dewy of feath-

ers, the rush expecting." Later the same spirit manifests itself. The people influence these writings more than they influence the people, so in the ballad we may find the reflection of their intellectual life. The English ballads are mostly anonymous, they tell us little of their authors. They are not the work of studious men, but rather of rovers, who love the fields, the woods, the open sky, life and strength in all their forms. The ballads were popular; they express the individuality of the people. We find in them no analysis of thought processes, or of motives; the singers are utterly unconscious of themselves. We learn the thought habits of the people, only from what they say, what they do and what interests them. Robin Hood, the outlaw and robber, is their favorite hero. Hard blows, hand to hand fights, blood-shed, please them. The most disgusting details are given with careful minuteness. We shudder as the singer introduces Halbert the Grim.

> "There is blood on that brow;
> There is blood on that hand;
> There is blood on that hauberk,
> And blood on that brand.
> The hardest may soften,
> The fiercest repent;
> But the heart of Grim Halbert
> May never relent."

But the singer knows his hearers, he extols men for doing deeds of horror and violence, fully assured that his hearers will join him in praising them. The people of that time, it must be admitted, were not over-refined in feeling and possessed coarse appetites that demanded the strongest stimulants; like the schoolboys of today, they were ready to test muscle and skill with each new-comer, and the strength of arm, not of brain, decided which was the better fellow. Their spiritual education was sadly neglected. The priests were too busy with the mysticism and ingenious nonsense of the scholastic philosophy or too merry over a pot of ale, to care for the real welfare of the people. Some of the people were taught in the learning of that time, for we learn,

> "Sweet Williams gane over the seas,
> Some unco lair to learn,
> And our gude Bailies ar dochter
> Is awa to learn the same."

Others could read and write; frequently the hero "writes a braid letter," and "seals it wi' his ring." There was a tendency

to use a blow for an argument, yet we hear them reasoning in a sharp and most matter-of-fact manner. As a whole the people were intelligent, but their intelligence is that of a highly developed animal, rather than that of a rational being.

Still more clearly can we learn the social life of a people from their ballads. The gleeman sang in palace and hut alike. His songs carry us, now into the rude hovels of mud and timber which protected the outlaw from the cold and the wet; now within the dark stone walls of the castle, with its chinks to admit the light, its rush-strewn floor and the huge pile of logs in the centre puffing the smoke into the faces of the revelers while the wild war cry and din of cups arises in response to the song of the bard.

Anon, we are in the merry green wood, chasing "the dun dear and the roe," and perchance

> "Be that it drew to the oware off none.
> A hondrith fat hartes ded ther lay";

or we may fight with the stout yeoman to while away our time, and "knock for knock" be "lustily dealt" until one chance to fall, then we grasp hands in friendship and the fight is done. Whether the song be of bower or hall we are present and see all.

Woman was always reverenced and considered man's equal; even the outlaws respected her person, for we learn,

> "Robin Hood loved our dere Lady,
> For doute of deadly synne;
> Woulde he nevrr do companie harme,
> That ony woman was ynne."

All were well trained in the art of surgery and the use of medicinal herbs, and they frequently save the lives of wounded men by the exercise of their skill. In "Sir Cauline," when the king learns that a favorite knight is ill, he calls

> "Fetche me down my daughter deere,
> She is a leeche fulle fine,"

and sends her to aid the sick knight. Woman's work and dress are thus described: —

> "Full well she was y coud the leyre,
> Of mickle curtesie.
> The silke well couth she twist and twine,
> And make the fine march-pine,
> And with the needle werke:
> And she couth helpe the priest to say
> His mattins on a holy-day
> And sing a psalme in kirke.

She ware a frock of frolicke greene,
Which seemly was to see:
A hood to that so neat and fine,
In colour like the colambine
Ywrought full feateously."

The language in use at this time is not over-refined; round oaths slip easily from the lips of the noblest, even queens are guilty, for

"Her grace she turned her round about
And like a royal queene shee swore."

Death was the penalty awarded woman's seducer; even a blow from behind was not considered dishonorable. While the seduced one was usually burned or murdered in cold blood by her relatives. Yet the moral code of the English was at this time, a loose one. They do to others as they have been done by.

"I' ll gie thee leave my fule," says Lord Scoope, if
"Thou gie me thy trowth and thy hand,
Thou 'lt steal frae nane but whae sta' frae thee."

and taking this novel oath the "fule" sets out on his stealing expedition. Again in "John Thompson and the Turk," we have

"Such mercy as ye meant to give,
Such mercy we shall give to thee,"

while Lord Jamie Douglas thus makes known to his lady the fate of him who had slandered her:

"O come away, my lady fair
Come away now along with me;
For I have hanged fause Blackwood,
At the very place where he told the lie."

Private revenge was the only way an insult or injury could be redressed in these troublous, lawless times. We hear "wise William" give this council:

"O gin ye suld kill him, Fause Foodrage,
Ye would do but what was right;
For, I wot, he kill'd your father dear.
Or ever ye saw the light."

This advice is at once acted upon. The freedom with which both men and women use the "wee pen-knife" that "hangs down at the gair," shows a degree of civilization equal to that of the Texas cow-boys or the miners on the frontier. Human life was at a discount, the sword was drawn on the slightest provocation;

bands of men were sometimes "hanged payor by payor" for trivial offenses. Yet there is a pleasant humor in their way of fighting that dulls the edge a little. Kinmont Willie jokes with "wanton jollity" as he is taken from prison on the back of his follower Red Rowan — "The starkest man in Teviotdale," who has risked life and limb to rescue him. Listen:

"Then shoulder high, with shout and cry,
We bore him down the ladder lang;
At every stride Red Rowan made,
I wot the Kinmont's airns play'd clang!

'O mony a time' quo' Kinmont Willie,
'I have ridden horse baith wild and wood;
But a rougher beast than Red Rowan
I ween my legs have ne'er bestrode.'

'And mony a time,' quo' Kinmont Willie,
'I've prick'd a horse out oure the furs;
But since the day I back'd a steed,
I never wore sic cumbrous spurs.'"

The hero Robin Hood is "jolly Robin," and enjoys a good bout with those he chances to meet. One Arthur facetiously answers Robin's challenge:

"'I pass not for length,' bold Arthur reply'd,
'My staff is of oke so free:
Eight foot and a half, it will knock down a *calf*,
And I hope it will knock down thee.'"

In religion they were superstitious Catholics: superstition is wedded firmly to ignorance and they were ignorant. They believed in the power of elves, magic spells, saints and devils with equal earnestness and simplicity. The men as they buckle on the "sore byting sworde" are exhorted,

"Every man thynke on hys trewe love,
And marke hym to the Trenite:
For to God I make myne avowe,
This day wyll I not fle,"

while Robin Hood

"Every day or he woulde dyne,
Thre messes wolde he here:
The one in worshyp of the fader
The other of the holy goost,
The thyrde was of our dere lady,
That he loved of all other moste."

Then, as a story closes with the death of the hero or lover,

directly his ghost returns to warn the living of their coming doom or to gain his troth-plight back, that he may rest easily in his grave. The tragic fate of many a knight or maid is due to the sorceries of some malicious person, usually a step-mother, while others are saved from death by similar spells. The "kemperye men" (soldiers) in the ballad of "King Estmere," refuse to fight because they see the spell of "gramarye" written on the bold challenger's forehead. The doings of the devil in disguise are told in serious solemnity, and once when a "little wee boy" gets the better of the old fellow as "the fause knight upon the road," we can almost hear the listener's low chuckles at his discomfiture. Fairies, too, must pay tribute to hell, and mortals dwelling with them, have good cause to fear according to "Young Tamlane."

> "But aye, at every seven years,
> They pay the teind to hell:
> And I am sae fat and fair of flesh
> I fear 'twill be mysell."

We rejoice at his escape and in the wrath of the fairy queen.

The legend of the breast-bone harp is one of the most wonderful and even beautiful of all. The sweet refrain, "Binnorie, O Binnorie, by the bonny milldams of Binnorie," lingers long in the memory. The harp, fashioned from the breast bone and golden hair of a drowned maiden, "whose notes made sad the listening ear," sings of its own sweet will, producing "Sounds would melt a heart of stone." It sings a farewell to father, mother, brother, and "William sweet and true," ending by pointing out the murderess,

> "But the last tunee that the harp play'd then,
> Binnorie, O Binnorie,
> Was — 'Woe to my sister, false Helen!'
> By the bonny milldams of Binnorie."

The priests were as superstitious as the people. The heavy taxes levied upon the people made the church unpopular. The people agreed in spirit with Robin Hood, who commanded his men never to let an abbott or priest escape, but to let the yeomen and good fellows go. They subsisted by rapine yet they were free and hospitable; they crossed out honesty from their code, yet the stranger found a safe and ready welcome at their board. They were courageous and fond of adventure, they loved the free

life of the green wood. Game was plenty and they fared well, even if the game did not always belong to them.

> "'Herof to speak,' said Adam Bell,
> 'I wis it is no bote:
> The meate, that we must supp withall
> It runneth yet fast on fote.'"

So they went out and presently

> "Eche of them slew a hart of greece,"

and soon they sat down to this gallant supper

> "And thanked God of ther fortune,
> They were both merry and glad."

The love of arms was a national passion. The spirit of this time is well rendered by a writer of a later date.

> "A steed! a steed of matchless speede!
> A sword of metal keene!
> Al else to noble heartes is drosse—
> Al else on earth is meane.
> The neighynge of the war horse proude
> The rowleinge of the drum,
> The clangour of the trumpet loude—
> Be soundes from heaven that come.
>
> Then mounte! then mounte brave Gallants all,
> And don youre helmes amaine:
> Deaths' couriers, Fame and Honour call
> Us to the field againe.
>
> Let piping swaine and craven wight
> Thus weepe and puling crye:
> Our businesse is like men to fighte
> And, like to Heroes die!"

There was not a battle fought on the border or within the English realm that was not celebrated in ballad verse. These ballads give us clear ideas of the rude weapons, the strange armaments, and other warlike gear then used. We have a siege, where the besiegers

> "Laid their sowiess to the wall,
> Wi' mony a heavy peal,"

but the defenders of the castle with "portcullize down and drawbrigg up"

> "Threw ower to them agen
> Baith pitch and tar barrel,
> With spring alds, stanes and gads of airn."

until the besiegers, after fifteen days' labor go away, leaving the lord of the castle

> "hale and feir,
> Within his strength of stane."

Among such a people, rude and war-loving, we have these ballads, sparks of poetic feeling showing the force of the smouldering fire. It needed but the breath of a purer air to burst into the brightness of the Elizabethan period. Not from one but from many came this chorus of song. Every contest, every hero was immortalized by the singers. He did not seek far for his story, but told that which he had himself seen and heard. He had no need to invent with such interesting material at hand in the actual every day life of men. So where we find pleasing expression, thought and deep feeling we may infer a kindred life. The characteristics of its time are clearly stamped upon every ballad, and though the impression is worn by much handling, the outlines are still clear. In mediæval times, the English possessed those qualities which have been the source of England's prosperity. Her ballads show us the strong arm, the sturdy heart of the primitive Englishman; his hardiness, his love for liberty and independence, and his reverence for kings, which has held him faithful to royalty against much provocation. But beyond all and more than all we find his love of arms and of adventure, — "the brave knyghts and bauld marineres," who have fought and won England's battles on sea and land, until "Faire Ingland" has become a "precious stone set in the silver sea," the foremost land in all the north countrie.

THE papers of the country are now taking considerable notice of what is called by the New York *Tribune*, "The Drug Swindle." There are quite a number of patent medicines which have come into general use, and the effects of which on the human system are pretty well known. The swindle consists in retail dealers selling imitations of these medicines in place of the genuine. However much we may deprecate the widespread use of these genuine medicines, without physicians' orders, this custom, which obtains with many druggists, of palming off vile imitations of these medicines is much more reprehensible.

THE ARTIST.

BY RETTA A. HOYLES.

A youth, a student of the art
Whose touch through color stirs the heart,
Within his master's studio wrought,
'Midst works with grace and grandeur fraught,
And felt resolve and purpose thrill
Responsively his soul and will.
"Ah, art is high, divine," he cried,
"I'll live for her and naught beside!"

Yet something fails in tints and tones,
Saddened—at close of day—he owns.
At night, the sketch the master found
And, pleased with signs of talent sound,
With skillful touch supplied the lack;
And when at morn the youth came back,
Perplexed, bewildered, he exclaimed,
"Some change by night my work has gained!"

"'Tis often so," the master said,
"When we, by lofty purpose led,
Sincerely work with all our might,
Invisible powers come in the night
And supplement the work of day
And turn to gold the tints of gray.
Trust Nature for her shuttles play
Both in the night and in the day.

Nor prize the work of day alone
Would you art's subtlest power own;
For as dim cares fair crystals hold,
As seeds in darkest soil unfold
And lilies bud in tangled fen,
So night brings dreams and stars to men."
And thus, with smile and thought mature,
He sought the youth to reassure.

The friendly words inspired the youth,
In darkest hours he found their truth.
And when, before his finished art,
Hushed thousands lingered, loath to part,
Few guessed the years of toil and strife,
Or knew the watchword of his life.—
Trust Nature, for her shuttles play
Both in the night and in the day.

EDITORIAL.

EDWARD EVERETT HALE, whose name is a household word all through the land, will have the opening article in the November number of EDUCATION. In the most interesting and instructive way, he will tell us all about: "How I was Educated."

STATE SUPT. HENRY SABIN of Des Moines, Iowa, president of the Department of Superintendence of the National Educational Association, announces that the next meeting of the Department of Superintendence will be held in Brooklyn, N. Y., Feb. 16, 17 and 18, 1892. "This early announcement is made in order that those having the charge of other educational meetings may avoid selecting the same dates." Such commendable progress in all departments will insure a great and successful meeting next July.

WE take pleasure in stating that a memorial volume of the late Dr. John Hancock, of Ohio, is being prepared by Dr. W. H. Venable, of Cincinnati. It will give a full history of his life, paying special attention to his work in Cincinnati, and his great and unwearied services as state school commissioner of Ohio. The book, which in Dr. Venable's hands is sure to be a valuable one, goes to the press early in November, and will be ready for delivery January 1st. It is a labor of love; the receipts, above expenses, all going to Mrs. Hancock for the education of her youngest son. Those who subscribe before December 1st will receive the volume for $1.00 (price, $1.25). The number of subscribers is already about 800. Address C. B. Ruggles & Co., the New American Teachers' Agency, Cincinnati, Ohio.

THIS year, the three hundred and fifty-one towns and cities of Massachusetts contain two hundred and forty-eight public libraries, in which the people have rights. Every new baby born in this state faces 2,500,000 volumes in free libraries, to say nothing of free school books. The state has invested $5,500,000 in reading matter for its children. Perhaps this fact accounts for the "decay of Massachusetts" of which we hear so much in states which do not have a free library within their borders. Abraham Lincoln once said to the delegation of temperance people who called to protest against the drinking habits of General Grant, — "Please find out what liquor he drinks. I would like to send a barrel of that brand to those generals who are always coming to

Washington to explain why the enemy beat them." So this wide-spread reading may explain the fact that Massachusetts is, today, the most prosperous state in the world, and it might be a good idea to bottle up some of this particular sort of "decay" for the use of communities that believe the political foolishness dished out to them by their own "great statesmen."

AFTER a long and honorable career, George Howland resigns his position at the head of the schools of Chicago. During his term of service, which had extended over eleven years, he has proved himself to be the right man in the right place, and one of the most successful of superintendents. He resigns, while still in the full maturity of his powers, and amid the profound regrets of all his associates. Such hearty words as those by Mr. M. B. Herely, of the city school board, show the estimation in which he is held in Chicago. This feeling is also shared in larger measure by the wider educational public. If this resignation from active service at Chicago means devotion to literature that the fruits of his experience and observation may be embodied in more permanent forms, the educators of the land will rejoice.

THE WORLD'S COLUMBIAN EXPOSITION of 1893 grows steadily in public interest at home and abroad. The Commission sent to Europe has aroused very great interest, and governments, and private individuals, and firms across the water vie with each other in preparations for the great exhibit. The different states of our Union are making liberal appropriations for the exhibits of their material interests. The sums thus set apart range all the way from Vermont's $5,000 to $300,000 by California, and also by Pennsylvania. But as yet very little has been done in the way of separate provision for educational exhibits. And yet this is one of the matters in which our several states ought to take the very greatest interest. Unless we are recreant to our trust and to our duty to the world in this matter, we shall make a full and worthy exhibition of all that is being done for education throughout the length and breadth of our land. As soon as it is definitely settled who is to be Chief of this important department, we look for new life and energy all along the line. Exposition committees should be appointed in every state — they have now been, so far as we know, in seven — special appropriations should be made, and the good work should be pushed rapidly ahead. There are brains enough in the educational fraternity of the land to prepare and present such an exhibit as will be an honor to the nation, and an instructive object-lesson to the world.

THE newspaper and magazine are now the open window through which the American young man or young woman may observe the landscape of modern civilization with its daily, weekly, and monthly variations. To ignore this vast realm of contemporary literature, at its worst more moral than the classics ancient and modern up to the last generation, is like a man shutting his window blinds and "evolving" the weather out of the depths of his own consciousness. But the busy young American with, at best, from five to ten dollars a year to spend, living away from libraries and reading rooms, need not despair of the opportunity for a valuable use of this invaluable educator. Among the best newspapers in the world are now the weeklies, made up from the great metropolitan dailies. Each is a weekly picture of the world. Some of the most valuable can be had for a dollar a year. One of these will keep the most secluded reader in touch with modern times. A village or neighborhood reading club of ten persons, paying in all $25.00 a year, may have five weeklies, — representing New England, the Middle, Northwestern, Southern, and Pacific divisions of the country, — the best educational monthly and the best weekly, several of the great magazines, and one or two of the best religious papers. They will all "keep" to be passed round and, when bound, will make a valuable corner-stone for a club library. And the difference between the culture of that group of ten and their neighbors will span the almost immeasurable space between the provincial and the cosmopolitan type of mind.

THE people who are pushing the Parochial school by the vigorous denunciation of state education as "godless," secular, etc., do not seem to understand that if Christianity is divine it must, in 1800 years, have so interpenetrated the public ideal of morality and practical religion in a country like ours that the whole people, including the clergy and all churchmen and women, can be trusted to handle the character training of a new generation, at least in connection with all other good influences and institutions. If this is not true, then the Christian religion is a more conspicuous failure than even Colonel Ingersoll maintains. In fact the American public's ideal of public and private morality is broader and nearer the New Testament standard than that of any sect, Christian or otherwise, — being the side of what Dean Stanley happily called the "Common Christianity turned towards the life that now is." The trouble with these clerical advocates is their inability to conceive of a moral and religious training of childhood and youth apart from the regular scheme of their own church, managed by themselves. But a state like Massachusetts does a great work in the character training of

children by its form of government and legislation, as they bear upon every institution and department of society. Contrast the protection of childhood and the opportunity of the family for moral training in a good Massachusetts village — the opportunity of the church, the bearing of legislation on the industrial and social life as concerns the children — with any former condition of human affairs. Compare the opportunity of the Catholic church, today, in New England, for doing its best in this line with its present status in France, Italy, Germany, or Russia. This Commonwealth indirectly enables all the great agencies of society to do more and better work for the children than was ever done before. Then it assumes to itself the training in public morality and the art of living together through the common school, the moral right arm of the state. To descend from this broad, comprehensive method of a republican Commonwealth to the ecclesiastical scheme would not be "a retreat in good order," but a cowardly "backing down" on the Europe of a generation ago.

SOME ten years ago, April 11th, 1881, two Massachusetts women, Sophia B. Packard and Hattie E. Giles, natives of the little town of New Salem, Mass., went down to Atlanta, Ga. And there, in the basement of Friendship Baptist church (colored), gathered a little squad of eleven negro girls, and began the work which the present year's report of Spelman's Seminary sets forth as an institution with seven hundred and fifty pupils; a property valued at $100,000, consisting of several acres of land in a commanding position in the city, two noble school buildings, four double houses, with the usual out-buildings, and plans already maturing for a normal practice-school. Last winter it was our privilege to spend a fortnight in this admirable institution; in some respects the best in its organization, social and religious discipline, and beneficent results of the many great mission schools established by the Christian people of the North for the colored people of the southern states. The living soul of the great machine was Miss Packard. From her girlhood a teacher, all the way from the country district school to the principalship of an academy in Worcester, Mass.; for several years corresponding secretary, in Boston, of the Woman's American Baptist Home Missionary Society; in company with her other self, Miss Giles, she began her work in Atlanta in the faith not only in God but in herself that prevails. After two years in the church basement she obtained a lodgment in the old United States Army barracks of Atlanta. In due time she "struck oil" in the veritable "flowing well" which the heart of good Mrs. Rockerfeller, wife of the "oil king," assuredly is. Thereupon arose Rockerfeller Hall, a stately pile.

A fire that burned out the older buildings sent Sophia Packard like a flame through the churches and, in 1888, Packard Hall was built. The only men on the campus are the wide-awake negro janitor and a "retired" colored preacher. The explanation of this miracle of success is that Sophia B. Packard, besides being a characteristic specimen of the old-time Yankee lady was an incarnation of the solid common-sense, executive force, mother wit and tact which makes the genuine New England woman the most effective in great good works of all the women of the earth. This great enterprise has been the work of her closing years. It was begun when she was well on to the fifties, and much of the time since she has been better entitled to the privileges of an invalid than the majority of "female sufferers," who test the skill and weary the patience of every school of medicine. The closing term was the last of her life, and she passed away in the early summer. Her associate, Miss Giles, is appointed to the presidency of Spelman and the good work will go on.

FOREIGN NOTES.

INTERNATIONAL CONGRESSES, SUMMER OF 1891.

AMONG the many congresses which have made the summer memorable, the International Geographical Congress, which convened in Berne, August 10, and the International Congress of Hygiene and Demography, which assembled at the same time in London, have special interest for educators.

In the Geographical Congress, fourteen countries and forty-six geographical societies were officially represented. The president, Doctor Gabat, in his inaugural address, claimed for this youngest of the sciences, a leading place in the list, because of its comprehensiveness. In reality, he here touched upon one of the difficulties in the way of giving the subject recognition as an independent science. Specialists in this subject would necessarily be men whose knowledge is encyclopædiac in extent and exhaustive in particulars. As pointed out in the congress, there has been but one such, Alexander Humboldt, and time is not likely to furnish an equal.

Geography must be differentiated from other sciences or remain the handmaid of all.

The chief contribution to the discussion of geographical education, was the paper by Mr. J. Scott Keltie, on "Recent Geographical Progress in Great Britain." Mr. Keltie noted that the mechanical

method of learning by heart, lists of names, statistical data, etc., has given place to the intelligent study of the earth's surface and its inhabitants. The advance is indicated, he said, by the increase and improvement in appliances and text-books. Mr. Keltie expressed the conviction that before many years had elapsed, England would have reached as high a level as Germany, France and Switzerland have already attained in the treatment of this study.

The congress passed a resolution in which the hope was expressed, that the various societies represented would urge upon their governments the importance of creating special chairs of geography in all colleges and universities not yet possessed of such chairs, and also a resolution declaring that it was advisable in school teaching, to develop the pupil's knowledge, both of physical and commercial geography, by employing suitable appliances, and in particular, specially constructed charts.

A resolution of interest to Americans declared that the honor of the discovery of the source of the Mississippi river belongs to Henry Schoolcraft, Lieutenant Allen and Engineer Nicollet, as against the claim of Captain Glazier, whose explorations took place in 1881.

The congress of Hygiene and Demography was the seventh of its class. Its discussions embraced a wide range of topics pertaining to health, sanitation, industrial occupations in their relation to health, etc. The work was facilitated by the division of the congress into sections, one of which was confined to the hygiene of infancy and childhood. Here problems of education found their place. These problems related chiefly to the proper training of feeble-minded children and those deprived of sight or hearing. The necessity of special provision for these several classes in a national system of education was recognized, and it was resolved that the congress should appoint a commission to collect information with reference to the physical and mental health of school children. Said commission to consist of persons severally conversant with the symptoms of mental or bodily infirmity. The proper sanitary conditions for school buildings and the necessity of teaching the laws of health in schools, were discussed in other sections. Demography formed an undivided section, presided over by Mr. Francis Galton. The word demography has been coined as a substitute for sociology. According to the programme, it includes industrial hygiene and the social condition of communities as viewed from the statistical standpoint.

The question to which Mr. Galton particularly directed the attention of the section was that of the genesis of the better members of a community. At the present time there is little material at hand for the solution of the problems here suggested, but the systematic research

which the section proposes to foster will undoubtedly result in the collection of a vast amount of data from which valuable conclusions may be deduced.

ENGLAND.

Elementary School System. — In moving the government appropriation for education in England for the year ending August, 1892, Sir W. Hart Dyke, who represents the Education Department in the House of Commons, submitted a statement of the work for the year just closed.

The grant for 1890–'91 was £3,782,224 ($18,911,120), which covered about fifty per cent. of the entire expenditure. The amount asked for the current year exceeds the above sum by £136,980 ($684,900). It does not yet appear whether this increase would suffice to cover the sum which will be lost by the abolition of fees. Mr. Mundella estimates that when the new measure has come into full operation, the annual grant must be raised to about £6,000,000 ($30,000,000). The statement of the vice-president showed advance in the operations of the schools in all particulars excepting average attendance. The enrollment which in 1889 stood at 4,750,000 reached 4,804,000 in 1890, the ratio of average attendance remained stationary. This seems to be partly explained by the increased efficiency of the schools which promotes the rapid advancement of pupils so that they reach the standard for exemption in a much shorter time than formerly.

The system of individual examinations that was set aside by the code which went into operation January, 1891, has afforded a standard of comparison having an apparent if not valuable precision. In the light of this, elementary instruction shows steady advance during the decade. The percentage of passes rose from 81.20 in 1880 to 85.14 in 1885, and 89.66 in 1890. The operations of the new code cannot yet be formulated in statistics, but conclusive proof was given that the greater freedom which it allows in respect to the classification of pupils and the choice of subjects outside of the three R's, is yielding excellent results.

The vice-president noted with approbation, the great increase in the number of pupils receiving instruction in drawing, especially in the rural regions, and the introduction of elementary lessons in agriculture in farming districts.

The multiplication and development of night schools is a hopeful feature, providing for the wants of bright pupils, who after reaching the exemption standard, drift idly around until old enough to work, forgetting what they have learned.

In London, the average attendance upon these schools has risen from 6,000 in 1889–'90 to 10,000 in 1890–'91.

ITALY.

The second triennial official report of public instruction in Italy recently published, covers the years 1887 to 1889 inclusive. The *Revue Internationale de l' Enseignement* presents the following particulars from this document: The supreme authority in respect to public instruction is committed to a superior council whose members are appointed by the king for a term of seven years. Like the French council, this is divided into three sections corresponding to the three orders of instruction. The service of local inspection is constituted similarly to that of France.

Italy possesses sixteen universities under the control of the State, and four private universities. The former in 1890 had 15,196 students and 633 professors; the latter, 345 students. The faculties of medicine and law attract the majority of the students.

The State University of Ferrara celebrated the five hundredth anniversary of its foundation last May.

Among institutions for superior instruction, must also be included the military and naval schools, the superior commercial schools, the forestry school of Vallombrosa, the school of social science at Florence, the two superior schools of agriculture, and the industrial museum of Turin. There are also in the kingdom, thirty-two libraries of great importance, of which, twelve are under the control of the State.

Secondary instruction is given in 1,061 classical colleges having 58,000 students, and in 493 technical schools, from which, Latin and Greek are excluded, having about 57,000 students. The schools of this category are divided into *Scuole Technichi* placed at the charge of the municipalities and imposed upon all cities of 20,000 inhabitants, and *institute technici* opened in cities of 40,000. The latter constitute the superior order, and their courses of instruction are adapted to the demands of local industries.

There are fifty-nine normal schools in the kingdom, comprising very nearly a thousand students. Two of these schools, viz., one at Florence and one at Rome, are exclusively for women.

CHILI.

Chili has a system of public instruction maintained by the State, certain features of which are copied from the French system. The National Institute corresponds in many respects to the University of France. It includes faculties or groups of professors for the several orders of liberal and professional study. These were attended in 1888 by upwards of 900 students. Attached to the Institute is an astronomical observatory which forms the central meteorological station.

It is installed in the midst of the botanical gardens. There is also a public library which is frequented annually by 28,000 readers.

The laboratories, scientific collections, special libraries, etc. of the Institute are modelled after the best European types.

For secondary instruction, there exist twenty-nine national colleges, which in 1888 had an attendance of 1,057 pupils, of whom, 200 were boarders.

Primary instruction is gratuitous; the state supports for this work, 960 schools, having an enrollment of 81,362 pupils.

The second session of the National Pedagogical Congress was appointed for the present year, but the civil convulsion may make a change in the programme. The first session held at Santiago, September, 1887, was characterized by the scope and earnestness of its discussions. All the great problems of modern education, the professional training of teachers, manual training in elementary schools, school hygiene, etc., were considered in the course of the two weeks' session.

GERMANY.

The Landtag of the grand-duchy of Saxe Weimar, in response to the petition of the association of German women, praying for the establishment of a gymnasium for girls and the admission of women to university courses, has declared that the grand-duchy is not prepared to take the initiative in a grave matter affecting the whole German empire, that the petition does not appear to command sufficient support, and that the Thuringian University cannot be transformed into a camp for experiments in respect to feminine claims. A. T. S.

MANUAL TRAINING FOR THE SCHOOLS OF BOSTON.

BY SAMUEL B. CAPEN.

Member of the School Committee.

At the last meeting of the Boston School Committee, Sept. 22, 1891, a carefully prepared report in favor of manual training was read by S. B. Capen, one of the ablest members of the Board. After paying a deserved tribute to Mrs. Shaw and Mrs. Hemenway for all they have done in this direction, Mr. Capen brings the matter squarely before the Board. We quote from the report as given in the Daily *Transcript* of the following day: —

"There are several reasons why this matter should now come before us, and some comprehensive plan be adopted for the whole city.

1. After long delay the City Council of this year have appropriated one hundred thousand dollars for a Mechanic Arts High School which before many months will be ready for occupancy. It is therefore time that we shape the course of study in the elementary schools with this advanced course in mind, so that boys who are intending to follow industrial pursuits shall be trained in the best way to avail themselves of this new opportunity.

2. It has been necessary experimentally to try various methods and plans in order to ascertain what can best be adapted to scholars of various ages, and where the course of study is already crowded. Out of this testing process we believe that some things have now become very clear, so that we are in a position intelligently to determine what is wisest for our present needs.

3. In making a comprehensive plan for all our schools, there will, if adopted, be required some considerable increase of expense for teachers, equipment and material. So long as our necessities for new primary and grammar schools continued so large, it seemed to be our duty to press that necessity, keeping down to the minimum every other expense. By the liberality of the City Council during the past three years there has been appropriated over a million dollars for nearly twenty buildings. Unless there should be in the future another period of neglect, it is not probable that such a large outlay as this in so short a period will be needed again.

* * * * * * * * * *

We shall have eight schools of cookery in operation this fall, and it is expected that the new school buildings now in process of erection will provide three more. It will be therefore necessary to ask for appropriations in 1892 sufficient to pay for four more, the estimate cost of which will be about $750 each.

As an offset to this education in sewing and cooking which is given to girls, we believe the boys, looking to their future, should have an equal consideration. We would therefore recommend that *manual training in wood-working for boys* be introduced as speedily as possible into all our grammar schools. We would emphasize especially the "all" in the previous sentence. We must be agreed that the children in every section of the city should share alike in the advantages which we believe are to come from this work. To have any favored schools is wrong. Whatever we do, we must plan alike for all throughout the city, and secondly, we should insist that this teaching should not only be universal for every school in the grade or grades selected, but that each scholar in these grades shall have the same privileges as any other. To take a part of the class only is wrong in principle, and must lead to bad results. If but twenty-five are to be taken from a room, as has often been true in the past, which twenty-five shall it be? Shall they be those at the head of the class? Probably the twenty-five poor scholars at the other end are the ones most needing the new work, and who will be the most stimulated by it. But if we take these latter and leave the others it is a poor compensation to those who have been most faithful in their studies, to have others less faithful or less gifted, enjoy privileges of which they have been deprived. Starting, then, with these propositions, viz., to teach the whole of every class and all classes of the same grade throughout the city, we come now to the important question as to the best classes to be taken.

In the discussion of this question we would say, first, that we believe the starting point of all woodwork should be from *drawing* and *not from models*.

To do this, a child must have some maturity to understand drawings, and to reproduce or translate them into wood. He needs also some muscular strength, which comes with age, to handle tools wisely. We would therefore not think of attempting at present wood-working below scholars of the fourth class. It may be said here by way of parenthesis, that in order that the scholars may not lose what they have already attained in the primary schools, in the sixth and fifth classes of the grammar schools the pupils shall construct with cardboard the various solid forms which they have been modelling in clay. This will give them still greater skill with their hands, and will be of an educational value in fitting them for the woodworking that is to come.

If we had the money at our disposal for room, tools, teachers, etc., the ideal plan, we think, would be to give the boys a four years' course of two hours per week. But it is an ideal plan for the moment, for we cannot obtain the money at once to teach the nearly nine thousand boys in the first to the fourth classes in our schools. And even if we had the money, there are not sufficient teachers yet available to give proper instruction. It will be necessary, for both of these reasons, to move more slowly. It is far wiser to take one class at a time.

The new course of study has provided for the time necessary for manual training, but has not arranged the curriculum in detail. This committee therefore beg leave in the appendix of this report to submit two plans for a four years' course. The principles are the same in both, but there are some differences in the practical adaptations. One of the plans is now being tested in the manual training school at Jamaica Plain, and the other in that in Warrenton street. Time will show which are the best features and then portions can be eliminated from each, leaving one harmonious system made from them both.

It has been thought wise to obtain the opinion of the various masters of the city as to which classes should first have this instruction, and the expression has been almost universal in favor of the higher grades. Following substantially the judgment of those who have had the longest experience, the committee are of the unanimous opinion that those first to be instructed shall be the boys of the second class throughout the city. A single teacher can instruct about 280 pupils a week, or ten classes of twenty-eight each. This will require for the nearly two thousand boys in this class throughout the city eight teachers.

There are five shops now in operation, and three more will be included in the furnishing of the new buildings now being erected, which will leave but six more to be provided. For the course of study we would recommend the one used in several of our schools the past year, the results of which were seen in the recent Industrial Exhibition. The boy when he has reached the second class is so old that he cannot spend time upon that which is elementary, but must take up this practical part of the work.

The following year we believe it will be wise to attempt instruction to the three thousand boys in the fourth class. This can be done at much less expense, as benches are not needed, but only boards placed upon the regular desks, and the tools are few and simple.

Your committee are not so enthusiastic as to believe that the introduction of wood-working into all our schools is to solve all our difficult problems or in any way be a substitute for the present intellectual studies. The fundamental things, reading, writing, arithmetic, history, geography, which are the

basis of all education, must still be taught. But, on the other hand, we do believe that a systematic introduction will be a priceless boon in many ways. Many boys after they have been three years in a primary school and three years in a grammar school, become weary of books and exceedingly restless. To such minds, doing something with the hands is a great relief and brings back the waning interest. *It carries the boy around and over that critical period in his life* when he is too old to be a boy and yet not old enough to feel the restraints and responsibilities of coming manhood.

Such training is not only educational, but *disciplinary.* The boy works off some of his surplus energy at the bench, and is more ready for his book. In a neighboring city where boys were from the worst homes and often unruly, the giving of them tools to use and work to do, changed their whole habit of thought. The change that has been wrought in some of our own boys is most wonderful. Before the tool work was introduced, they were unruly and almost ungovernable except by severe measures. Now all is changed; they have learned the law of exactness, the value of time; there is self-reliance and dignity awakened, and even the suggestion that they may under certain circumstances be deprived of their tools is the severest of all punishments. Furthermore, although it is sometimes questioned, in the two grammar schools where this work has been done under the best conditions, it has been found that as much was done intellectually as before, when the whole time was given to regular studies.

Again we believe it will be true in this city as in others, that the introduction of wood-working in the upper classes will help to *retain the boys much longer in school.* One of the most unfortunate things with regard to many of our boys, in the past, has been that they are taken from school as soon as the law will permit and set to work. In many of our schools, not one boy in four that enters finishes his course. These boys, therefore, enter active life with a poor education and they are handicapped in the race at the start. Parents will permit the longer course if the boy is to have the additional advantages which this education will give. As so many of them become mechanics of various kinds, a trained eye and a skilled hand will be of inestimable value.

The practical value of this new education is already seen in one of our schools where wood-working has been introduced. The boys are nearly all from homes of poverty, yet the parents want their children to have a better chance in life than they themselves had. In the past they have, when young, been taken and put to work as errand boys or into offices of one kind and another. But there is very little opportunity for such boys to advance. As they grow older the pay is not increased, younger boys can do their work at a less price, and they lose their positions. They are too proud to work as common laborers, they will not beg, and they learn to steal and fill our criminal classes. Now all is changed; just this class of boys are beginning to ask about positions as carpenters, masons, tinsmiths, etc., and a new world which was closed to them before is now opening."

After a careful discussion of the advantages of teaching these things in large classes rather than small, the report proceeds: "With regard to the expense to have benches adjustable for scholars of different ages, and hard-wood tops, with full sets of tools and everything in place, we think it is not safe to estimate at less than $25 each. It is proposed to have twenty-eight benches in the shop, or enough for one-half of a full class. This would make the total expense for

benches, tools, etc., per shop, $700. We shall need two hundred and eighty racks to hold the work, as each boy's work must be kept separate. This would probably cost all put up for each shop $150, or a total for fitting up each shop of $850. The six more needed would therefore cost $5,100.

For instructors we believe there are teachers now in our schools who have been taking the course of training for two or three years and who are fully capable of teaching it. We already have four teachers. The four more needed if the salaries were fixed at $800 per annum would make a yearly increased expense of $3,200.

The other expense for material used is very slight, not more than fifty cents per pupil for the year, or about $1,000. We need, therefore, to ask in the appropriation for 1892 for $5,100 to fit up the five shops needed, and $3,200 for the increased instructors. The fourth year course when we reach it in 1893 will cost as follows: The frames fitted to the desk and all the tools required will not cost over $5 per pupil or, for a full class of fifty-six pupils, $280. There are fifty-five grammar schools, boys and girls, so that the total expense for the furnishing would be about $15,000. But this would be all the expense, as by this time there will be at least one teacher in every school capable of giving this instruction. The cost of renewal of tools from year to year would not be large. It is a parallel case to free text-books, the great expense will come at the commencement for the outfit.

We know that it will be a disappointment to many that no provision can be made at once for wood-working for the girls. But for the reasons first stated, we believe the boys should first be provided for. We hope the day is not far distant, however, when some instruction in wood-working can be given to the girls also.

There remains only a brief allusion to be made with reference to the Mechanic Arts High School. A plan of study for this school was proposed by Superintendent Seaver in October, 1889, as a supplement to School Document No. 15. The suggestion has been made that it might be wise to allow pupils for that school to take a shorter course in the grammar school in order to enter earlier upon their high school course. But after careful consideration this committee are of the unanimous opinion that such an arrangement would not be wise. A boy who is to make a success in any mechanical vocation needs the mental discipline and furnishing of a full grammar course. To allow boys to enter the high school too young would only be to reduce the grade of that school and send out boys finally not properly equipped for industrial success. We therefore believe that the requirements for admission should be a grammar school diploma or an examination that shall be equal to it, and that no one shall be allowed to enter at less than thirteen years of age. Every effort will be made by studying the experience of other cities to make this school of the highest order. As the high and Latin schools of this city have always been considered superior, every effort should be used that an equal place shall finally be accorded to this Mechanic Arts High School."

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned. Articles of special importance to teachers will, as a rule, be mentioned in notes.

Americans and Home Rule, The. *Saturday Review*, Aug. 22. "Unless we have been greatly misinformed by those who ought to know American society well, there has throughout this Irish controversy been a pretty strong undercurrent of rational opinion. Had any one of the great New York journals a few years ago been enterprising enough to invest in truth and sense with regard to the Irish question, it would probably now be receiving very handsome dividends on the investment."

Aphasia and Music. Ueber die Bedeutung der Aphasie für den musikalischen Ausdruck. Richard Wallaschek. *Vierteljahrschrift für Musikwissenschaft*. No. 1, 1891. Aphasias and agraphias in music, parallel with those in speech. Some can pronounce words only by singing them; some can speak but not sing. Differences due to association, thinks the writer.

Armada, The Spanish story of the. J. A. Froude. *Longman's*, September. Account in English of the Armada, according to recent publication of Spanish papers by Captain Fernandez Duro.

Astronomy, Modern. R. S. Ball. *Contemporary*, September. Comments on Presidential speech at annual meeting of British Association. Motions of the stars determined by the spectroscope. "To biologists, this will be the century of natural selection; to physicists, it will be the century of the spectroscope."

Bach, Johann Sebastian. Wm. F. Apthorp. *Contemporary*, September. Comparison of Shakespeare and Dante. As Dante is the scholar's poet, so Bach is the musician of the students of music. His chief influence is through other musicians; united learning with originality, but will never be popular for he speaks an obsolete idiom.

Book speech and folk speech. *Library*, August. A plea for more Saxon and less Latin in English speech, with illustrations from Shakespeare.

Bossuet, La philosophie de. Ferdinand Brunetière. *Revue de Deux Mondes*, August 1. "Bossuet said that the heretic is he who has an opinion, and it was his religion to invent none; but he had to follow his opponents on to their ground, and to new assaults he had to oppose new defences. He sought to draw his arguments from the disagreements of his opponents."

Canadian Scandals. *Saturday Review*, August 29. "In both Canada and the United States, the more hopeful critics are wont to maintain that explosions of public indignation such as broke up the Tammany Ring — for a time — and may now punish the detected sinners in Canada, purify the air. But these hopeful critics do not sufficiently realize how severely the necessity for these periodical clearances condemns their form of government. Democracy has certainly not been found to favor the production of a high standard of statesmanship or of manners in the conduct of public affairs. If it does not promote honesty, what has it to show for itself?

Cathedrals, The Nationalization of the. H. W. Massingham. *Contemporary*, September. "In the last fifty years, the Church has largely lost her able administrators, her scholars, and her thinkers, as well as her statesmen, her poets, her saints, and her heroes." Downward trend especially in cathedral appointments. "Why not have layman deans at Norwich or Canterbury, as well as in Oxford or Cambridge colleges, and laymen canons of distinction in literature, in art, in science, in travel, and in philosophy, in place of the passmen from Oxford, the fussy partisan, or the obscure writer of half a dozen sermons which nobody reads?"

China, Advertising in. *Cornhill*,

September. "Advertisements give unconscious and therefore trustworthy evidence of the current standards of intelligence, morality, and refinement, quite as much as of the prosperity or poverty of a country." Four daily papers in China. Gambling and medical advertisements most prominent.

Coming Man, The. Dr. S. V. Clevenger. *American Naturalist*, July. He must have excellent physical and mental heredity, good training, not many competitors for parental care, parents neither rich nor poor so that they can afford to give the child direct supervision, knowledge of most practical worth, cultivation of self control.

Compulsory Insurance in Germany. Professor Geffcken. *Nineteenth Century*, September. "Every system in which the government tries to play the part of Providence must break down as did the State-socialism of Napoleon the Third, who dreamed of an extinction of poverty by employing large masses of workmen in public works. The law seems to us a failure, because it has undertaken to cover the polymorphous and complicated relations of life by a net work of uniform paragraphs."

Cape Colony. Wie das Kapland Englisch wurde. *Preussische Jahrbücher*, August. Account of capture from the Dutch of Cape Colony by the English in 1795.

Dairy, The chemistry of the. Vaughan Cornish. *Knowledge*, Aug. A simple statement of scientific facts.

Demography. Douglas Galton. *Nineteenth Century*, August. Concerning the subjects discussed by the Congress of Hygiene in England.

Eton Jubilee, The. Arthur C. Benson. *National Review*, July. Fifty years ago the chief occupation at Eton was writing Latin verses. Mathematics, natural science, and modern languages gradually grew at the expense of the Latin. Very little independence of action among the boys; conventionality and public opinion in the school are very strong.

Ibsen. Henrik Ibsen's Poems. Philip H. Wicksteed. *Contemporary*, September. By quotations from Ibsen's works, the writer attempts "to give English readers some of the material for a judgment on Ibsen's claim to the name of a poet, and at the same time to point out sundry clues, to the meaning of his later writings, which may be found in his early poems."

Imperial Federation. *Nineteenth Century*, Sept. An English View by Lord Brassey. "If we remain one empire, we have at our command forces which are practically irresistible. If we separate, our small overpeopled island and the young communities which we have called into existence, scattered over the globe, would present, in their weakness, a contrast painful to contemplate, beside the solid weight, dignity, and power of a united empire."

An American View by Andrew Carnegie. "England's policy is peace and free trade with all the world. There never was a people so artificially maintained. That she, being so placed, should be counselled by a body of able men to inaugurate an industrial war against the world, seems something not to be accounted for by any process of reasoning."

Jukes again. *Saturday Review*, Aug. 29. "Let us seclude hereditary criminals kindly, says Dr. Strahan, work on their higher nature, as is done at Elmira; let their instinctive criminality be held to qualify them for the receipt of a gratuitous University education, and when we have blunted the edge of their evil passions let us turn them loose and see what will happen. We have a more effective and we think a more scientific remedy. It is to seize upon all the Jukeses in the country and extinguish them painlessly."

Lasalle, Ferdinand. Nina Kennard. *Nineteenth Century*, Sept. "Lasalle gave the German people the idea of freedom and within limits the right of free expression and free action. The heroic work of helping the world forward happily does not wait to be done by perfect men."

Macbeth as the Celtic Type. Moira O'Neill. *Blackwood's*, Sept. The Celtic characteristics are: Vital imagination, Mutability, Treachery, Sympathy with nature, Eloquence, Superstition. All these are prominent in Macbeth. Lady Macbeth might have averted the catastrophe if she had not had a superstitious Celt for a husband. A Celt is at any rate an unsafe thing to reckon with; but a Celt with a dash of genius is absolutely incalculable."

Memory. James Ross, M. D. *Brain*, Part LIII. "Memory is a mode of consciousness, and hence to speak of

unconscious memory is a contradiction in terms. Our primary knowledge of memory is obtained by introspection. Memory is capable of being separated from other modes of consciousness, but the boundary is an indefinite one. Memory of Macaulay more remarkable but less useful than that of Darwin, because the facts of the former were not held together by scientific bonds."

Pedagogie, La. *Revue Bleue*, Aug. 22. Discussion in the Academy of Moral and Political Sciences, M. Gréard holding that pedagogy is a science based on psychology; M. Courcelle-Seneuil, that pedagogy, like all other practical sciences is only an art; M. Ravaisson, that it is both, that art and science can never be separated, for every art implies a science of which it is the application, — that pedagogy rests not on psychology alone, but also on the philosophy and art of the past.

Peintres, L' hérédité chez les. L. Arreat. *Revue Philosophique*, Aug. "Among about three hundred names of painters of which we have a list, almost two-thirds are sons of painters, and probably the other third would be considerably reduced were our information more complete."

Photography. Where young amateur photographers can be of assistance to Science. R. W. Shufeldt. *American Naturalist*, July. The writer photographs animals, first stupefying them with ether fumes or hypnotizing them, and taking them while recovering.

Prohibition, The Economic Basis of. Simon N. Patten. *Am. Aca. of Polit. and Soc, Sc.*, July. Great change during last fifty years in the drink-question largely owing to effect of drinking being worse now, which is due to change in living. Greater variety of food and living in warm, close houses, — effects are less eating and more drinking. Irregularity of climate, treating, mixed drinks, graded series of drinks cause much intemperance.

Rouen, A sermon in. W. F. Stockley. *Macmillan's*, September. Question of religious education a frequent topic in French sermons. "Peace between the church and a state indifferent to dogma is impossible. France is not at rest without a recognized religion; perhaps no state can be. And perhaps no state with one can be as tolerant or indifferent towards men's minds as is the French Republic."

Russland und Finland. *Unsere Zeit*, Heft 8, 1891. The spirit of levelling and uniformity in Russia is agitated over the comparatively independent and autonomous position of Finland.

Training ships, The value of. *Chamber's Journal*, Aug. 1. England has twenty-one of these; two are for education of officers, giving them high school course without classics, with French and practical surgery and medicine In those for training ordinary seamen, the general objects are to take hold of homeless, destitute, neglected, and orphan boys, and those in danger of being contaminated with vice and crime.

University of California, The. C. H. Shinn. *New England Magazine*, September. "The educational lack of California at present is in the line of preparatory schools. The 'new constitution' of California, in 1879, cut off the High schools from the state school provisions, and threw them on the charity of the local boards of education. This, which was one of the worst results of the granger agitation, soon began to affect the Freshman classes of the colleges." J. P.

AN INCISIVE REVIEW.

AN INTRODUCTION TO THE GREEK LANGUAGE: Comprising Accidence and Syntax; Exercises and Vocabularies, etc., etc. By Maurice C Hime, M. A., LL. D., Head Master of Foyle College, Londonderry. London: Simpkin, Marshall, Hamilton, Kent & Co., Stationers' Hall Court. Pp. xix., 330.

The expressions "my college," "my assistants," "my boys," which occur in the preface of this book, lead to the inference that Foyle "College" can be nothing but a private school for boys, of which Maurice C. Hime, M. A., LL. D., is not only head master but sole proprietor also; they thus awaken prejudice

against both the author and his book. There are, however, many features of the book which suggest that it is the work of a successful teacher of Greek, — one who is, therefore, entitled to an opinion as to whether a school grammar should be constructed as an exercise-book, or as an authoritative book of reference on the forms and usages of the language. My own experience confirms me in the belief that a grammar should be a book of reference, in the preparation of which a scholar of undoubted authority should be responsible; I have also the belief that such a grammar should be the student's "inseparable guide and oracle" *from the very first*. As a book of reference Dr. Hime's grammar must be called a failure. Besides being inconvenient, as all such combination grammars are, it fairly abounds in statements the doctrine of which could be successfully challenged by the merest amateur in philology; while the chapter on Conditional Sentences and that on Temporal Sentences are both well nigh worthless.

With regard to the make-up of the book, as a combination of grammar, exercises, questions for review and examination, Dr. Hime says, "There may be many such books in existence, but I have never seen or heard of any such; neither has any of my masters." This seems scarcely credible. A book on almost identically the same plan was issued in Germany by Dr. Raphael Kühner (1837). An English translation of this book by J. H. Millard was published by Longmans (London, 1844); another translation was issued by Dr. S. H. Taylor, then principal of Phillips Academy, in 1846. Dr. Taylor's translation was published in London (1864) under the editorship of Dr. Charles W. Bateman; and, strange to say, Dr. Bateman's edition was brought out by the very same house, Simpkins, Marshall & Co., by which Dr. Hime's book is now published.

The beautiful redaction and typography of Dr. Hime's book might perhaps be considered its sufficient *raison d' être*, even if it showed no superiority in technical scholarship over a work issued twenty-five years ago; on the contrary, most critics will think otherwise.

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AMONG THE BOOKS.

Books on Civics multiply and the healthy demand for them is one of the hopeful signs in the educational field. It is not sufficient that a text-book on civil government be confined to an exposition of the Constitution of the United States, the call is for a scientific treatment of the entire system of government, beginning in the home and proceeding through all the forms under which citizens of this country live. This call is met in a text-book issued by the American Book Company, entitled ELEMENTS OF CIVIL GOVERNMENT, by Alex. L. Peterman, late Principal and Professor of Civil Government in the Normal School of the Kentucky State College. Professor Peterman begins at the beginning, and develops the idea of government from the known parental control, up to and through the school, the civil district, the township, the county, the state, and the United States, Every step is taken carefully, and an intelligent view of all the intermediate governmental units is presented in turn and in logical sequence. In arrangement, in compactness, in matter, manner, and style, the book is one of the best on this subject.

To their series of books for teachers, E. L. Kellogg & Co., New York, have added two valuable and choice little books, both written by Dr. J. A. Reinhart. One is entitled OUTLINES OF HISTORY OF EDUCATION, and is especially prepared for young teachers. It contains within its seventy-seven pages a succinct account of the history of education, an exposition of the various theories held by the most famous pedagogists, and a plain presentation of the main facts in educational progress. Dr. Reinhart's other book is an OUTLINE OF THE PRINCIPLES OF EDUCATION, and aims to give in a brief but satisfactory form a philosophical view of the intuitive, imaginative, and logical stages of education, and the principles of moral education. Dr. Reinhart is a clear thinker, a graceful writer and an enthusiast on the subject of education. All young teachers will find his little books of great worth to them.

PRINCIPALS OF AGRICULTURE, by I. O. Winslow, gives in concise form the relations of the natural sciences, chemistry, natural philosophy, geology, physical geography, and botany, to the science of agriculture. The chapters are necessarily brief, but the book is intended for a guide and outline of the work proposed rather than for a text-book. To this end, the questions, following each chapter, will be found helpful by the wide-awake teacher. Following these chapters on the related sciences, comes several bearing more directly on the subject in hand. The farmer, potential or actual, is now prepared to learn why "rotation of crops" is necessary, how it has been possible to convert the dry, arid regions of southern California into fertile fields by under-drainage, and why animals fatten better and quicker on one kind of ration than they do on another seemingly as good. Published by the American Book Co., of New York.

DUTY is the title of a remarkable little book for use in schools, by ex-President Julius H. Seelye, D.D. LL. D., of Amherst College. In these brief pages he attempts "to give to the cardinal principles and the chief facts of morals a treatment which should be thorough, at the same time apprehensible to the mind of a child." If to the author the result reached in these sixty pages falls far below the standard, to the more friendly critic they will seem the mellow fruit of a mature and luminous intellect, and admirably adapted for their purpose. The child who carefully reads what he says here about duties to God; duties to mankind, including those in the family and to one's own body and mind; duties to others, and to the government, will be well equipped for the leading of a useful, successful, and truly noble life. We wish this booklet could be studied in all the schools of our land. Published by Ginn & Co., Boston.

War has a special fascination for most minds. The number of books bearing on this subject is almost innumerable. New ones are constantly appearing. Among the most important of this summer's additions we note, THE STRUGGLE OF THE NATIONS, by S. M. Burnham. The author, who has previously published books on "Limestones and Marbles," and "Precious Stones in Nature, Art, and Literature," here attempts "a condensed military history of all the nations of the world that have a record, from the earliest period to the present day, comprising a list of their principal wars, battles, and sieges, together with a concise description of the different countries where these conflicts occurred, and the treaties of peace which closed the strife." Over six hundred wars are described or referred to, and between 3,000 and 4,000 battles. In vol-

ume I. the survey covers the whole world outside of the United States. Three-fourths of volume II. is devoted to our country and largely to the late Civil War. Of course the view is cursory and fragmentary, and there is much hasty work, but it gives the reader a birdseye survey of the horrors and actrocities of all war. How frequent and terrible has been — "Man's inhumanity to man." A valuable chapter is that which speaks of the different kinds of treaties, "and certain general principles necessary to be observed, in order to make them valid, and explains the celebrated treaties of the world, and also the famous leagues, confederacies, alliances, truces, diets, councils, congresses, coalitions, and other unions which different nations have formed with one another." The Appendix and Index are of real service. For those who wish some knowledge of the course of wars throughout the world, and have not access to the full and exact works, this compendium will answer a good purpose. It lacks much in finish and necessarily in thoroughness. Such a mistake as that on page 299 of 5,000,000 for 5,000,000,000 francs seems unpardonable. The volumes are bound in leather backs and cloth sides. Price per set, $6.00; or, $3.00 per volume. Published by Lee & Shepard, Boston.

Circulars of information issued by the National Bureau of Education are among the most valuable contributions to the literature of education. Circular Number 1, of 1890 is a volume of 343 pages, giving the History of Federal and State Aid to Higher Education in the United States, by Frank W. Blackmar. The author traces the history of early colonial education, and then of each state in the Union is given an account of the beginnings of public education and of its present status. Circular number 2, is a report of the Proceedings of the Department of Superintendence of the National Educational Association at its meeting in Washington, D. C. All the papers read at the meeting are given in full. Circular number 3, is entitled "The Teaching and History of Mathematics in the United States," by Florian Cajori. In this volume of 400 pages is given an exhaustive report of the history of the teaching of Mathematics in this country, of the influence of English and French mathematics, and of the condition of mathematical teaching at the present time."

The title of the book is its best exposition. It is A PRIMARY WORD BOOK, embracing thorough drills in articulation and in all the difficulties of spelling and sound to be met with in primary reading, by Sarah E. Buckbee, Principal of Primary Department, School No. 19, New York City. The author says that the book contains what she has used with success for many years in teaching the elements of language to all kinds and classes of primary children. Against this experience there is no argument. Miss Buckbee has certainly proceeded on correct scientific and pedagogical lines in building up her word-book, and there ought to be no question of the success of a teacher using her book. Boston: D. C. Heath & Co.

Prof. R. Sanderson, of Harvard University, has edited TROIS COUTES CHOISIS, by Daudet, and D. C. Heath & Co., have added the volume to their modern language series. Daudet's stories are among the finest in the realm of French literature, and the student of the French of today will find instruction and delight in reading them. The brief notes are models in their compactness and clearness.

Number 15, in Kellogg's Teachers' Manuals is PESTALOZZI, his Educational Work and Principles, by Amos M. Kellogg. Mr. Kellogg writes of Pestalozzi *con amore* and a reading of his little manual will awaken a desire to become more fully acquainted with the foundation principles of this great educational reformer.

A volume indispensable to geologists and mineralogists is Dr. T. Egleston's CATALOGUE OF MINERALS AND SYNONYMS. The names of the species are printed in full-faced, capital letters, and those of synonyms are printed in ordinary type. One-half of each page is left blank for the purpose of making notes, etc. John Wiley & Sons, New York.

"FRENCH BY READING," by Louise Seymour Houghton and Mary Houghton is the latest contribution to Heath's Modern Language Series. Many difficulties which the American boy or girl meets in his or her study of French have been smoothed away, and that incomprehensible linking or *liaison* of final consonants is made perfectly easy. D. C. Heath & Co., Boston.

The ingenuity of Americans is not confined to mechanical invention; it is also applied to devising ways and means of education. Here are two. The first, a card-game called the "Gift of Tongues," by which children can become acquainted with the German language by playing with its grammar which has been skillfully dissected and tabulated. Published by Avery & Co., 45 Park street, Orange, N. J. The second, is a device for calling out the observing powers of children. "Studies in Nature and Language Lessons," proclaims in its title its mission to the young. By S. Berry Smith, of Central College, Fayette, Mo. D. C. Heath & Co., Publishers.

"READINGS FROM FRENCH HISTORY," by O. B. Super, of Dickinson College, aims at something higher than the ordinary school reader. It seeks to make known the style and method of treatment used by the masters of historical research. In the first half of the century, France was the great political arena of the world, and none were so intensely interested in her welfare as her own citizens. They strove with sword and pen for her good; the journalist became as famous as the general, and the efforts of the former led to vast historical research in which quite a number became masters. Professor Super has culled from this vast amount of material at hand choice bits from Thierry, Mignet, Lamartine, Thiers, and Guizot. The notes are admirable specimens of discrimination, being chiefly historical. Published by Allyn & Bacon, Boston.

The compiler of a book of words for pupils in school to use and by means of which a fair degree of accuracy in spelling may be acquired, will merit much at the hands of teachers, parents, and the pupils themselves. For a time the spelling book has been in disfavor, but happily this time is nearly passed and there is a wholesome demand for a spelling book constructed on rational lines and in harmony with the newer ideas of teaching language. In A GRADED LIST OF COMMON WORDS DIFFICULT TO SPELL, the compiler, James H. Penniman, Instructor in English in the De Lancey School, has arranged a list of words by a new method, and has chosen those words that are most frequently misspelled. He begins his list with words which are the "little foxes" to pupils, and he continues with words, commonly used in writing, and frequently written incorrectly. Teachers will welcome this little book and be glad to use it in their schools. Philadelphia: Sherman & Co.

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY, AND LITERATURE OF EDUCATION.

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HOW I WAS EDUCATED.

BY EDWARD EVERETT HALE.

THE methods in detail of my life in school and college differed very little from those of other New England boys of the first half of this century. I should never think of asking any one to read any account of them. But the editor of this magazine is collecting a series of terrible warnings and of bright examples, and has been kind enough to ask me to join in the symposium. Everyone likes to recall the brighter passages of his boyhood, and I am quite willing to comply.

His object has special reference, I suppose, to school training, and I will speak of that first and chiefly,— including Harvard College among the schools.

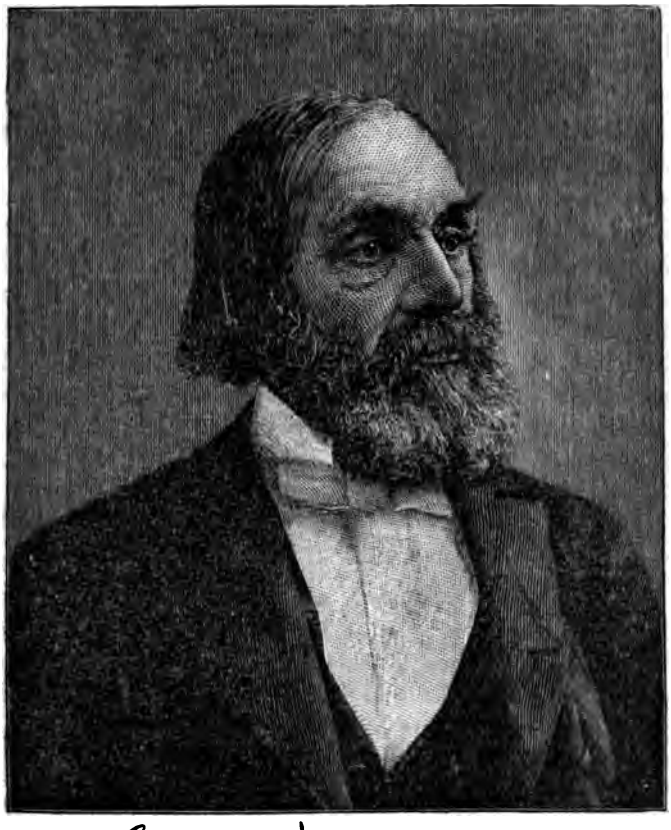
I cannot remember the time when I did not go to school. For I was the youngest of a group of four children, with whom I spent all my waking time,— not to say that I shared a trundle-bed with one when we were asleep. To this one, I may say, in passing, I owed in the first twenty years of life the largest share of my real education, which must be described, if anywhere, in another place. Naturally, I was irritated, when, from day to day, I saw the three elders of this happy band taken to school by Fullum, — who was also an important factor in my education. Fullum was a kind-hearted, thrifty, wide-awake man of genius who had come as a country boy to Boston about the year 1812, and, when I was born, was the man-of-all-work in my father's household. From that time, 1822, till he died in 1887, he consid-

ered himself responsible for me and mine. In fact, as his life drew near its close, when he was almost one hundred years old, he said frankly that I gave him much more anxiety then than I did when he occasionally had the charge of me as a baby. To see Fullum go off twice a day, with my three companions, to a place called "school," was naturally disagreeable to me who was thus left to the oversight of home. And I begged, not to say insisted on going, so that at last Miss Susan Whitney, who kept the school, — herself, I suppose seventeen years old, — was good enough to receive me. Of all this I remember nothing. I only know that among them all, I learned to read so early that I have no recollection of any time when I could not read as well as I can now. I do remember that we read from the New York Primer. It was printed by Mahlon Day, of New York. It had some pictures in it, from newspaper wood-cuts, of which the only one I remember was a distiller's "still." My father was an editor, so that we knew these cuts well, from having seen them in newspapers.

At that school, good children had ribbon bows of yellow, pink or green pinned on their clothes to go home with. A bad child would have a black bow. There is a terrible story, — not even then credited, and probably untrue, — that one boy to whom the black bow was attached, threw it in the street on his way home. A certain terrified curiosity attached to him, on account of this doubtful, not to say incredible rumor. It was a nice school, in every way. In those days, school-room floors were not carpeted, but sanded semi-weekly with clean sand. It lay in tempting little heaps in front of the bench on which you sat. No one objected, I think, if you scraped it up in a heap bigger yet, by a certain action of the infant foot, and then mashed the heap flat, by the sole of the shoe. In this flat you might then make little holes or patterns, with a pin or a broom splint. So we united the advantages of the modern sand garden and kindergarten. We had no curtains to the room. If the sun shone in, in the morning, the shutters were closed, and through heart-shaped holes in the top beams of sunlight entered. In those beams it was my privilege to conduct Huxley's experiments on dust, its shape, origin and motion, many years before he did.

The only incident I can mention of three or four years' education there, must come in as a warning to young teachers. When

Fullum came for me one morning, when I was quite too small to go home alone, he found me sitting in a large chair in the middle of the room. I remember the chair perfectly. It was a yellow wooden chair of a pattern now not often seen. I was crouched



Always Yours
Edw. E. Hale.

comfortably in the chair, reading a book which interested me. When Fullum arrived, I was taken down, my "things" were put on, and he led me and my sister home. So soon as we were in the street, he asked me what I had been doing which was naughty. With perfectly clear conscience, I told him I had done nothing naughty. He said, however, that no child was ever put

in that chair, unless he had been naughty, and I remembered, then, for the first time, that this was certainly so. Up till that moment, however, I had not known, nor suspected, either that I had done wrong, or had been punished. Nor have I ever learned since what my offence was, nor why I was punished. It is only by accident that I knew that I was punished.

It seems to me that this anecdote, with the corollaries which depend upon it, may be of use to young teachers.

A few months before I was six years old, I was transferred to a man's school. My older brother, guide, philosopher and friend, of whom I have spoken, had been sent to one of the high-pressure, much advertised schools, where they have "methods" and new systems, and a great deal of machinery generally. Just at that time they were trying the "Lancastrian" system, — a plan for making it sure that each teacher shall be as ignorant as possible of the subject in hand. My father was a thoroughly sensible man, who had been an admirable teacher in his day, and he saw right through all this tom-foolery. It was never criticised at home, I think, but I was sent to another school just established. There was no thought for a moment then of sending either of us to the regular grammar schools of Boston. They were simply dens of cruelty, kept by tyrannical men who were proud of their different switches, ratans and raw-hides, and regarded them as the only real instruments of education. In fact, their masters were ignorant men, whose opinions would never have been asked on any subject. I and my brother were to go to the Latin school, which was on an entirely different basis, as soon as we were nine, and were simply to be occupied until that time came. He had been sent to King Stork. I was sent to King Log, and I have always been very glad of it. He was a college graduate and knew enough for our purposes. He did not, on the other hand, keep us wild with excitement, about rank, or success, or failure. Why should he? Is it not sure that life will have quite enough of that stimulus, as boys change into men?

I have in later days been satisfied that my father sent me to this school, simply that I need not be over-excited, or worried, and that the time might be passed, with a certain regularity, till I should go to the Latin school. He knew that the teacher was a man of no force, and of little sense, as well as we boys did. And at seven years old, I knew this as well as I do now. I could not,

however, understand then as well as I do now why my father sent me there.

My experience there and at the Latin school afterwards enables me to make a personal contribution in the open question as to the best way of teaching Latin or Greek. Shall we learn them as most people learn a modern language, — by merely plunging in and swimming, — or shall we teach the grammar carefully, and refuse to let the pupil go forward any faster than he goes with perfect accuracy?

Under Mr. Gould the Boston Latin school had been made the school of most repute in the country quite without exception, and it was pledged to the latter theory. That theory was carried out more absolutely than it is now. The boy committed his grammar to memory, — from the alphabet at the beginning to the end of the syntax, before he read three words of the language. It was a dead pull of verbal memory for nearly a year.

Now my father was a skilful and successful teacher. He had been instructor in mathematics at Exeter. Before that, in the year 1804 – 1805, he had fitted for college young Dickinson, who was afterwards a senator from New York in Congress. He took this boy in the fall of 1804, and in the fall of 1805, sent him to college, with a sufficient knowledge of Latin and Greek, attained in one year, to enter.

Governed by this experience, and his own good sense, he had no faith in any of those superstitions, — which suppose that because it is convenient to keep boys ten years on Latin or Greek, it is in any sort necessary.

But he thought there was no harm in putting a little boy's quick verbal memory to use. He told King Log, therefore, when I was six years old to see that I learned my declensions and verbs in Latin — and in fact, I did know by the end of that year the *sum*, *es*, *est*, the *amo*, *amare*, *amavi*, *amatum*, and the rest of what are called the paradigms, as well as I ever knew them. At the same time I was encouraged to read scraps of Latin stories. We had a ridiculous little Robinson Crusoe in Latin, which we used to fumble over; so that when I went to the Latin school, I had a considerable Latin vocabulary; I knew all my paradigms, and knew by rote the principal rules of the syntax.

In consequence, I was advanced one class there, and, at nine years, was in a class with boys of ten. I knew the meaning of

more words than they. But I saw, at once, that they knew much more Latin than I did. I saw that I knew nothing of the language.

I remember to this moment the delight I felt when Sebastian Ferris Streeter, sub-master of the school, explained what was meant by the rule which said verbs of accusing "governed" an accusative and a genitive. I knew the rule perfectly well, without any sense of its meaning. The phrase is itself absurd, and it spoke well for the good sense of any boy that he refused to put on it the conventional meaning. But the fact that my former teacher had never cared to tell me what it meant, was equally absurd.

From this contrasted experience I have some right to speak. And I have no question, that, for the average boy, — or the boy above the average in verbal memory, it is safe and more satisfactory to insist, from the beginning, on accurate grammar. It is also possible to unite this on the first lesson, with some knowledge of the vocabulary. And whenever you have teachers enough you may go forward very rapidly in this union of accurate grammar with an increasing vocabulary.

But, for the boys beneath the average in the matter of verbal memory, I would begin simply and wholly with the language, — reading, talking and hearing it, — and letting the grammar take its chances. I asked a distinguished Hungarian statesman once, how he learned his Latin. "I was sent to school when I was ten," said he, "and I knew I should be flogged if I were caught after I had been there one month, talking in any language but Latin." It is perfectly in our power to teach Latin in that way when Latin happens to be important enough. By the way, he and I were both talking Latin as he told me the story, and we had no other method of interchange of opinions.

It was no little time before I fairly worked into the systematic way of studying Latin. There were boys always ahead of me in the class, because they had been well trained in the accuracies of language from the beginning. To the end, I never could write a Latin exercise, without errors, which, after some one else had pointed them out, I could see as well as he could. Still, I am apt to think, that so far as literary enjoyment of Phaedrus or Virgil went, I had as much of it as had any of the boys. We were made to read Cicero and Sallust. These are entirely beyond the

range of the average boy of fourteen or fifteen. He would not enjoy them if he had them in English.

When it came to Greek, I had another affair. Francis Gardner broke us into Greek, he was then a young man. Afterwards he was a distinguished leader in this matter of education in language. He permitted no mis-steps, no nonsense of any sort, indeed. What we learned, we learned, and it was right from the beginning. So it is that I always read Greek decently well, and to this day enjoy Greek literature more than I do Latin literature. Greek is, indeed, a better language, for all purposes of language. It would be hard to say how much the world has been set back by what one calls accidental limitations of the Latin language.

Mr. Francis Gardner was a great deal more than a good Greek scholar. He was a thoroughly just man, true and honorable. I know that, as an old man, he was thought hard, and I suppose he was. But this must have been due to the ruinous effect of arbitrary power, which is bad for anybody, be he schoolmaster or emperor. In my day at school and afterwards when I was an usher there, he carried with him into his room that atmosphere of integrity, honest purpose, and straight-forwardness which very much impresses boys. What boys want is that everything shall be fair. "Gardner's always fair," they would say. The son of a rich India wharf merchant, or some little North-ender who never had his shoes blacked, were alike before him. Truth, honor, and good intention were all he cared for. He did not make the mistake which teachers are apt to make, of valuing a bright boy more than a stupid boy, if only the stupid boy meant well, that was "all Gardner asked for."

I remember his spending an hour over a question I raised, purely that he might do me justice. The Greek word "δόξα" went down the class. He wanted us to say that it meant "glory." I offered as a meaning, "honor," guessing, I suppose; for I do not recollect that any of us knew anything about it. When it proved that "glory" was right, I said that "honor" was a good enough substitute; that the words might be used interchangeably. Probably I was wrong. But he eventually yielded the point to me very frankly, after he had worked over the dictionaries, and tried various citations to see how the sense would go, if the words were changed. The boy of eleven feels the implied compliment, if you please, thus paid to him. He never said anything about

our moral nature to us; but we understood that he threw us on our honor. Indeed, the tone of honor in that school was very high. I do not think that, of 150 boys in it, there was one boy who dared to tell a lie.

I have heard Mr. Gardner in after times say pathetically, that with four parents out of five, if you said, "Your son is a dull boy; but he is perfectly true and honorable," they would not be satisfied. But if you said, "Your boy is the brightest boy in the class; but I am sorry to say he does not seem to me to be as strict as he should be in telling the truth," the father would go off much better pleased than the other father would be. Let us hope that this was the exaggerated statement of a man very strict in his notions about such affairs.

The course of the Latin school was then five years. This means that the boy began in that business of committing Adam's Latin Grammar to memory, so that he could repeat what was marked of it verbatim from one end to the other; and came out with a decent ability to read Virgil, to read what he could understand of Cicero, and to read the passages in the Greek Reader. He also had picked up an average working knowledge of algebra, and a good basis of arithmetic. There was a pretence of geography. But when I was examined for college, twelve of us in succession, from one training-school and another, said that London was north of Amsterdam, and no boy in the section even guessed at the truth.

I had entered the school a year in advance, so that I had read in four years "Viri Romae," Phaedrus's "Fables," Nepos's "Lives," Sallust's "Catiline" and "Jugurtha," some twenty orations of Cicero, and Virgil's "Bucolics," "Georgics," and the "Aeneid." This means, as I am told by my accomplished friend, Mr. Collar, as much in quantity as two of Dickens's novels. Somehow or other they managed to spread it over four years. I remember, however, that I was absent from school when the boys read the first half of the "Aeneid," so I went up to the top of the house the day before we went to be examined at Cambridge, and read the first six books in one afternoon. I am quite sure that we should help in the matter of learning Latin and Greek, if we put a good deal of such rapid reading at sight in, as a relief from the careful grammatical handling of a page or two.

It is the fashion to say that Harvard College was then nothing

but a high school. This is true enough so far as the forms went. That is to say, we went into a recitation room and recited exactly as we had done at school. The modern language men felt that they were initiating us into a literature. They interested us in Molière, Racine, Tasso, Dante, Schiller, Goethe, and other authors in their respective lines. But I do not remember a single word said, in the Latin or the Greek recitation-rooms about, anything but a rule of grammar. The consequence was that, when, at the end of the junior year, we were relieved from Latin and Greek, I threw both those languages over for a year. By great good fortune, I had to teach them both afterwards; and so began an acquaintance with both the literatures. But for this I owe no thanks to any college teacher. In the French, German, Italian and English languages, however, my college experience was wholly different. Edward Tyrrell Channing had the charge of the English department, and the men of that time owe to him any ability to write the English language. This is a rare gift at the present time. Longfellow was put in charge of the Modern Language department. I was almost entirely ignorant of French when I entered college; and at the end of my Junior year, I could read French better than I could read Latin or Greek. I think something like this would be said by most men, and I think the teachers of the "classical schools" ought to tell us why boys do not learn more of the two languages in which most pains are taken.

I was a good deal bored in college, not by the men in the class, — men they called themselves, though they were not twenty years old, — but by the rules and the teachers. Still I look back on college with great pleasure, and am very glad I was there. The theory still held, which seems to me the true theory, that, in a young man's education the specialty shall be kept out of sight as long as possible. The college was carried on on this principle. Whatever was to follow it, — law, the ministry, a doctor's life, a civil engineer's, a schoolmaster's, or a merchant's, — all of us had the same training for it while we were there.

This means that each of us was taught the language of his time, so far as that college knew how to teach it.

Thus, if, the day after I left college, I had been in the company of an astronomer, a chemist, a geologist, an engineer, a botanist, a farmer, or a musical composer, and he were talking

intelligently of his profession, I should have understood the words he used. If I had the wit to hold my tongue, I should have learned something. To take the last instance. We had been taught, up to a certain point, the laws of musical composition. I knew how to transpose the notes of an air from one key to another key; I knew why it was done, and, in a fashion, how it was done. For the theory of the place was that every man who left it was to be so far instructed in the English language as used in his own time. So I knew, up to a certain point, why, in the newly created railroads, one shape of rail was better than another. And every man in my class knew it, — or had had a chance to know it. If a man spoke of re-agents in chemistry, we knew what he was talking about. There was not one of us fit to undertake any work which the world wanted. But it was supposed that we knew enough to listen intelligently to the men who could undertake such work.

This was what was meant by a liberal education, as contrasted with a "special education." It was then supposed that the education for a specialty would follow the "liberal education" attempted in the college.

COMPOSITION.

BY KATHERINE H. SHUTE.

Assistant in the Boston Normal School.

THE term *composition*, in this paper, will be used to include all written work in which the expression is original with the pupil; the thought may or may not be original. This definition, it will be seen, includes everything from the briefest statement which the child may write in answer to a simple question, provided the expression be his own, to the most elaborate attempt at essay writing by the advanced student. I shall confine myself, mainly, however, to the work done in primary and grammar grades.

With this definition and limitation in mind, I invite a brief consideration of the following points: First, the value of composition in education; second, the preliminary work which serves as a preparation for composition; third, the choice of subjects; fourth, methods of conducting the composition exercise; fifth, the neces-

sary training for teachers of the subject; and, in conclusion, composition viewed in its relation to reading.

What claims has composition to a recognized place in our courses of study? Both fallacies in thought and weak and inadequate expression, it will be granted, are much more readily detected when the pupil attempts to express himself in writing. He feels more dissatisfied when the result of his slipshod thinking faces him from the written page than when he produces equally shabby oral work, and becomes ambitious to express himself more clearly; for often he does not recognize the fact that the fundamental trouble is in his thought and not in his expression of it.

But clear expression is dependent upon clear thinking, is, indeed, impossible without it; and — what is more — the effort toward clear expression, the effort to impart thought to others, reacts upon thinking and forces it to be more discriminating. In its reactionary effort upon thought, it seems to me, lies the chief value of composition work.

In the second place, added power in the use of clear, forcible, elegant English is a result which we have a right to expect from judicious practice in the art of composition.

Again, composition may be used effectively as an incentive to the imagination; because even the simpler processes of composition require a re-combining of the materials with which the mind is already stored, while the higher forms of the art call for the highest and most far-reaching activity of the creative imagination.

Finally, composition may be so employed as to awaken a more intelligent and sympathetic appreciation of literature; inasmuch as the effort to produce work of any kind leads an intelligent and candid mind to value more justly the work of others in the same field.

That it renders thought more discriminating, increases the power of expression, incites the imagination to greater activity, and develops an appreciation of literature: these are the claims which entitle composition to an honorable place in our school programs.

Admitting the claims of composition, what training shall be given little children from the time they first enter school until they are ready to take their first feeble steps in the art? Since in the natural order of things, oral expression precedes written,

since, in truth, written language is but a later and more artificial dress for thought, it is essential to consider what may be done in school to develop the child's earlier means of sharing his thought with others — oral language. We might, indeed, go a step further back and ask what means are to be taken to develop habits of logical thought; and this would introduce an inquiry which should antedate the last; — how train the child in correct habits of observation? But these inquiries, although entirely pertinent in a thorough study of the subject, are hardly within the scope of this limited paper.

In brief, there are three directions in which the little child is to be trained. His mind is to be stimulated to healthful activity; he is to be encouraged to express himself with freedom and is to be critically watched, and tactfully led to make his expression clear, correct, and complete; and finally he is to have much practice in arranging written work upon the page with some degree of knowledge, accurate so far as it goes, of paragraphing, the use of capitals and punctuation.

How are the habits of correct oral and written expression to be formed? For unless they are habits, the child is always to be hampered in the practice of composition. The ability to write properly when an especial effort is made is one thing, the habit of writing properly is another.

The habit of expressing thought in clear, accurate, complete sentences may be formed, as many of us know from experience, with very little children when they are only beginning their school life. If in every lesson in which answers consisting of complete sentences are desirable, the teacher requires such sentences every time, rejecting slipshod answers when they are given and occasionally rewarding good answers with judicious praise, the little folks will soon grow ambitious in the matter and the habit will take care of itself.

Habits in written work are more slowly but just as surely acquired. The first sentence which the child is allowed to write on his slate should be correctly written as regards arrangement, spelling, capitals and punctuation. The same care should be taken with the next statement and with every succeeding statement until the habit is formed.

This seems a very small matter and one easily accomplished, but it is wonderful how many teachers know how not to do it.

In the first place the teacher should use great care about her own written work on the board, not only that which the children are to copy, but that which they are to see and gain impressions from. It is a very trite saying that we learn to do things correctly by doing them correctly, but one worth repeating here. A child never learns to make good sentences by using careless English which the teacher accepts without protest; neither does he learn to write in correct form when left to himself to tell "what he remembers about the pretty story," being permitted the liberty of his own untrammeled imagination as to arrangement, punctuation, etc. Not only does he fail to form good habits but he distinctly succeeds in forming bad habits, which some future teacher must strive to counteract with labor and sorrow. Neither will the child whose work is seldom examined and never corrected form good habits. He may be kept busy (even this is a question when one considers the weakness of poor human nature in performing unrecognized duties), but that he will form habits of correct written expression which are to stand by him in the serious business of written examinations and essays is well nigh hopeless.

There are yet other simple and convenient means of forming bad habits, but how are good habits to be formed? The means to this result are equally simple, but they must be persistently used. Frequent exercises in copying and dictation which are to be examined and rigidly corrected will after a time result in the formation of habits. There should be a minimum of written work required, but it should be chosen with a definite purpose.

Boston has had its season of running wild over written work in primary schools. There are strong indications that the tide has turned, but it takes time to counteract so violent a movement. Over and over again, I have visited schools where the main object seemed to be to keep children busy with the slate and pencil and where the quantity of the work and not the quality was commended by the teacher.

Granted then that the preparation for composition work in its simplest forms consists first in the child's power to express himself orally in complete sentences, and second, in the ability to write in the proper form from a copy or from dictation, we next ask how much of the child's school life shall be devoted to acquiring these habits? Roughly speaking, much can be done toward establishing them in the first two years, and very little is gained

by attempting any written work outside of this in these two years. During the next year the same work should be continued, but the child may also spend a comparatively small part of the time devoted to written language in answering questions in his own words, in reproducing brief stories or fables, guided at first by the teacher, sentence by sentence, and finally — because the sentence habit has been established — he may be left to himself to reproduce in writing what he has shown himself capable of reproducing orally. He may also write simple letters, guided at first by the teacher, sentence by sentence, in the expression of his thought, and finally, left to himself, he may write upon certain topics agreed upon beforehand.

In the lower grammar grades, that is the fourth, fifth, and sixth years of the child's school-life, this work should be continued and reproduction in writing from topics of lessons previously discussed orally may be introduced. In the higher grammar grades, the pupils may attempt essays upon subjects connected with the school-work or upon any other topics which interest them.

If the objection is urged that this plan is too limited and cramps the child's originality, it may be said in reply that there are ample opportunities in the school-room, both in lessons and friendly conversation, to encourage and develop the child's individuality, without running the risk of developing habits of careless written expression, which is inevitably the case, as some of us know by sad experience, when the average child does much unaided writing.

Why is the composition hour so often an occasion of childish misery? Why do most healthy children "hate" compositions? Is not the opportunity to tell what we know and care about in and of itself a pleasant and desirable thing? I think it is, and I dare say that more of our children would think so if we used a little more common sense as regards our choice of subjects, and our methods of conducting the composition exercise.

In the choice of topics, two extremes are to be guarded against: One is the tendency to confine the composition work too closely to school matters, so that the child once within the four walls of the school-room finds no escape and sees no delightful, intimate relation between the life in school and the varied life outside, with its games, its story-books and its bright fancies. The other is the danger of paralyzing the young mind with an abstract sub-

ject far above its grasp. Doubtless we have all had our share of suffering of this sort. I well remember, at the age of eleven, sitting down with dismay in my heart to grapple with the mysterious and baffling subject of "Mutability."

In regard to the method of treatment, no greater mistake can be made than allowing the child to work by himself too early. If the first few compositions are made class exercises in which teacher and pupils take part, — the teacher guiding the thought, leading the pupils to see first the main divisions of the subject, then the subdivisions of these, building in until the pupils are so full of the matter that they must express themselves, then calling for full and free expression, throwing aside all ambiguous or inaccurate language, asking at times for a variety of statement for the same thought, choosing the most concise or the most vivid or the most graceful, arousing, in short, an enthusiastic desire for clear thought and appropriate expression — were this done, the brighter children would not suffer, the slower would gain steadily in power, and all would find pleasure in the work.

Little by little the pupils should be required to do more work by themselves. John is to write upon this division of the subject, quite by himself, and Charles is to try this topic, and Tom that, and thus together we are all to contribute toward the whole. And all the time the teacher speaks with enthusiasm and with happy anticipation of the coming day when each boy shall write by himself an entire composition. Nothing is truer than that children regard with enthusiasm a thing in which the teacher herself seems full of enthusiastic interest. From the little child who longs to read the new word, because the teacher's eyes sparkle with pleasure when she looks at it, to the great overgrown boy who attacks the perplexing problem with patient energy, because the teacher's voice thrills with interest as she speaks of the difficulties to be overcome, enthusiasm is contagious.

How shall the normal school pupil be trained to teach her own pupil's? Four ways are open to some normal students, three to others, two to all: First, observation of lessons given to primary and grammar pupils by experienced teachers; second, actual work with real children, subject to criticism; third, illustrative lessons given by the normal student to her own classmates; and finally, and the main part of the work must be done in this way, careful discussion of the subject in the classroom, — its scope, its value,

the proper preparation for it, methods of conducting it, and the practical difficulties and the abuses which beset it.

Because the rightful claims of any subject are best appreciated when it is viewed in relation to other subjects, I should like in conclusion to draw attention to one thing which is always to be borne in mind in discussing the value of work of this kind. Composition is not the only, nor the most valuable, means of training the child in the use of his mother tongue. Before and above this must always come wide and intelligent reading. Throwing aside exceptional cases of diffidence or other personal peculiarity, the wide reader is the good speaker and writer. He has something to speak and write about, he has unconsciously added great store to his vocabulary in his varied reading, and has appropriate expression for his thought.

I have said that composition may be made a valuable aid in the training of the active form of the imagination, but only, it seems to me, when reading has been allowed to do its work in training the passive imagination. Here we meet another abuse altogether too frequent in our schools in recent years. The young child is given a picture and is asked to write a story about it. Now in addition to the fact, already suggested, that in his spasmodic effort to invent a story, the child makes sad work with his written forms in which he has not yet had enough practice to render him trustworthy, he makes up his story by merely stringing together ideas which present themselves to his mind, as he looks at the picture, with very little if any logical sequence. Because now and then a child with inherent story-telling power does a good bit of work in this direction, because most of the children like it, and because it keeps them busy and produces a tangible result with very little work on the part of the teacher, this method of training the language power and the imagination has found great favor in our city schools of late years.

Let us see what the actual results of this training are. In addition to habits of careless writing, including spelling, with which legacy the child is passed on to the higher grade grammar teacher and not infrequently to the much-suffering high school teacher, he develops a reckless, illogical method of tacking ideas together, and is permitted to dignify the performance with the name of *thought*. Could any training be more misleading?

That the story-telling power — than which there is no more de-

lightful and attractive accomplishment — can be developed by patient, judicious training, in which the study of pictures plays a very small but not unimportant part, I have no doubt whatever. But one trouble has been that we have looked for harvests in seedtime.

As was suggested earlier in this paper, composition work, properly conducted with older pupils, increases the appreciation of good literature. If the effort to think for himself and to express his own thought is supplemented by reading what other people have thought and said so much more clearly, more convincingly, and more gracefully than is possible for him, this very effort toward expression on his own part brings a keener realization of the merit of what he reads. I have sometimes thought that this is not merely the best, but perhaps the only, reason for allowing pupils to write verses. The effort to clothe thought in metrical language and the search for felicitious expression, awaken a keener delight in reading true poetry. The moment a boy or girl is allowed to feel any great degree of satisfaction in his own work, — whether prose or verse, — the moment that the time given to original production is allowed to outweigh the time devoted to the study of real literature, that moment finds the composition work an injury rather than a benefit.

In some schools the matter of composition is pressed too far, I think, and reading suffers in proportion. To use the ever serviceable simile, the teacher attempts to draw water from dry wells. Let reading and free discussion of what is read have their rightful place in the school course, and with less time than is now devoted to composition, better results may be obtained. A few words of no uncertain sound from John Morley's address to the students of the "London Society for the Extension of University Teaching" bear directly upon this subject. "I venture, with all respect to those who are teachers of literature," he says, "to doubt the excellence and utility of the practice of over-much essay-writing and composition. I have very little faith in rules of style, though I have an unbounded faith in the virtue of cultivating direct and precise expression. But you must carry on the operation inside the mind, and not merely by practising literary deportment on paper. It is not everybody who can command the rhythm of the greatest masters of human speech. But every one can make reasonably sure that he knows what he means, and

whether he has found the right word. These are internal operations and are not forwarded by writing for writing's sake. I am strong for attention to expression, if that attention be exercised in the right way. It has been said a million times that the foundation of right expression in speech or writing is sincerity. It is as true now as it has ever been. Right expression is a part of character. As somebody has said, by learning to speak with precision, you learn to think with correctness; and firm and vigorous speech lies through the cultivation of high and noble sentiments. I think, as far as my observation has gone, that men will do better for reaching precision by studying carefully and with an open mind and a vigilant eye the great models of writing, than by excessive practice of writing on their own account."

If this is true for adult students, those capable of pursuing university studies, can we say too emphatically that for our primary and grammar school pupils, precision and power are not gained "by excessive practice of writing on their own account"?

THE KING'S CONVERSION.

RUTH WARD KAHN, LEADVILLE, COLO.

Once in the days of old,
In the days of crime and dearth,
Edwin of Kent was a ruler bold,
The bravest man on earth.
He was good, but he worshiped idols,
'Till the chaplain came one day
To the hall of his grand old castle,
To sing, and preach, and pray.

"Man's life," he said, "is like a bird,
Which, on a winter's day
When all is still and cold without,
Comes circling on its way;
It views the rushlight and the fire,
A moment stays and sings,
Then, darting from the heat and light,
He lends the darkness wings.
Where 'twas before, and where it went,
No man on earth doth know.

"'T is thus with life—a moment here
It flickers in the sun,
And then the soul is called to God,
The mortal race is run.
What 'twas before there's no man knows,
Its future none can see,
Oh, King, *my* faith can tell you all,
I pray you follow me."

The King and council listened there
To what the chaplain said,
And when the aged noble ceased
The King bent low his head,
And followed him where'er he led,
E'en to the temple fair,
And when the nave he there had gained,
He raised his hands in air,
And shouted so that all might hear:
"To-day my soul I gave
Unto the Father, God of all,
He's mighty still to save."
From that day forth proud Edwin's land
With one glad voice did raise,
Unto the "Father, God of all,"
An anthem glad of praise.

GENERAL BUTLER'S COLLEGE LIFE.[1]

MY mother's clergyman, a good Baptist, was consulted upon my being sent to West Point. He advised strongly against it. He said that I was a religiously inclined boy, and one well versed in religious principles; and at West Point there was, he understood, a great deal of free-thinking among the pupils, if not among the teachers. He felt that if I went there my religious feelings and principles would be derided and scoffed at, and that I should doubtless be converted into a free-thinker myself. And, therefore, as my mother earnestly desired that I should be a clergyman of her persuasion, he thought that I had better be sent to a good Baptist college, at Waterville, Me., (where he had grad-

[1]From the manuscript of Gen. Benj. F. Butler's Autobiography, by arrangement with his publishers, A. M. Thayer & Co., Boston.

uated) in the labor department, where I could do something to earn my subsistence. He was convinced that there, aided by the example of those around me, I should probably fulfil my mother's long-cherished expectations by becoming a clergyman. He was a very good man, but had very little insight into human nature, or at least into the nature of the boy for whom he was dealing.

He ought to have known that if I had been sent to West Point, and had my comrades, or anybody else, derided, scoffed at, or belittled the religion of my mother, I should have fought for it, stood by it, and found argument to support my belief in it.

So I was sent to Waterville, where a majority of the pupils were fitting for the ministry, and some of them were even then performing, in part, the duties of clergymen.

Before the first year had ended, I had changed my intention entirely regarding the ministry, if ever I had much in that direction, and devoted myself to the physical sciences, especially chemistry. I was exceedingly interested in books of alchemy, and in the experiments which had been made in the vain endeavor to find the philosopher's stone. I think I was imbued almost with the enthusiasm of the earlier chemists, and above all, I was inspired to believe that chemistry and its adjuncts were to be the means of opening a very great field of highly promising labor and research to benefit all mankind, particularly in the study of those sciences which were to test the magnetic and electric discoveries by Galvani, the results of whose researches were then exploited by the great discoveries of Sir Humphry Davy. I believed that the gates for pursuing chemical knowledge and investigation in a regularly defined and scientific manner were opened by the wonderful invention of the murdered Lavoisier in his chemical nomenclature, which gave name and place to all chemical substances in their relations to each other, and took them out of the unintelligible and incongruous diction which surrounded, hindered, and impeded all the work of the alchemists.

Static electricity, claimed to have been deducted by Franklin, from heaven, and produced on earth by friction upon certain resinous and vitreous surfaces, seemed to me to be too evanescent, fitful, and uncontrollable (because one must use all or none of it at one time) to be of any effectiveness in the arts, or of substantial use to mankind, save, as I was taught, as a remedy for controlling the nerves of delicate women. I took great interest in

Compliments of Benj. F. Butler.

that mysterious substance which made to quiver the leg of a dead frog lying on a copper plate when touched with a piece of zinc, and which could be produced in quantities sufficient for experimental use by means of the pile of Volta. This pile could readily be made in a student's room by building up plates of differently oxidizable metals with soft, moistened, porous mattings between them. It furnished power sufficient for electrical experiments in the same direction in which Davy, by a powerful battery of cells, was reducing into new combinations at will substances which had been hitherto deemed entirely simple and elementary. This substance, I believed, was the elective power of the future. At that time, so far as I knew, no thought of any connection between magnetism and galvanic electricity had occurred to the scientific mind. For nearly two years, I pursued my scientific studies. They were substantially outside of the course, because our professor of chemistry, Dr. Holmes, for reasons satisfactory to himself, did not think it worth while to give lectures on chemistry. Prof. George W. Keeley, however, gave us the fullest instructions on light and static electricity, by which I very much profited. I believe it was at that time that I first heard of Miss Sommerville's conceptions as to the polarization of light.

Of course, these studies did not advance my standing in my regular recitations, some of which I must confess were wretched. I remember one in geometry which called forth an animadversion and a reply, neither of which was proper, between teacher and pupil. The teacher took the chalk from me as I retired from the blackboard, and said, in the presence of the class, "Butler, you do n't know anything." The pupil replied, "Not about that demonstration; but I can tell you a good many things that you don't know,"—which was as true as it was impudent. It was admitted in college, however, that upon the subjects of which I have been speaking, I was farther advanced than a pupil, and I was allowed to have access to the chemical laboratory as assistant to Professor Holmes, who was not there. I had one mate in these studies, Mr. David Wadleigh, and we devoted ourselves to chemical experiments together, with the natural result of actually blowing each other up with explosive preparations.

There was another matter which made me careless of my standing in the regular course. It was that the rules of the college required students to attend prayers at daylight in the winter at

the chapel, and go to church twice on Sundays. I regret to say I did not always do this, shirking the prayers more frequently, however, than the sermons, perhaps, for the reason that I was very much interested in the doctrinal character of the latter.

In the latter part of my junior year in college, a matter came to my attention, which caused an entire change of my intentions as to a future professional life.

I had occasion to contemplate the professional acumen, the varied learning, the great and commanding insight into men's motives, and the mastery of the minds of other men, shown by a lawyer in conducting a trial of a case before a jury where facts are to be elicited, fraud and falsehood foiled, conflicting testimony and discordant facts compared and put together, and a great result worked out.

In a neighboring county, a case was tried, where the country's great lawyer of that day, if not of any other day, took part (and almost sole part) in sustaining a will.

To the reader who is not a lawyer, the name of Jeremiah Mason, and his skill as a tryer of causes, are now almost unknown. Even by the profession he is largely forgotten. Almost all great lawyers who do not write books have their names handed down by tradition, and even this fades out almost entirely after the lapse of half a century.

Daniel Webster was once asked whom he considered the greatest lawyer of the United States. He answered: "I should, of course, say John Marshall [Chief Justice of the Supreme Court of the United States]; but if you should take me by the throat, and run me back into a corner and demand, 'Now, Webster, upon honor, who is the greatest lawyer?' I should have to say Jeremiah Mason."

I was quite young when I first saw Jeremiah Mason. In later life, I saw him not unfrequently in court trying cases, some of them of the very greatest importance, and I had such a cause to reverence and admire him that in my library, where I now write, stand three busts of the three greatest lawyers, each in his peculiar sphere, of whom I ever had any knowledge: Jeremiah Mason, Daniel Webster, and Rufus Choate.

The consummate ability and skill shown by him in perhaps one of his most important trials, — the case of Ware *v.* Ware, which I have mentioned, — has nearly tempted me into a description of

the trial. But I am warned that I cannot do Mr. Mason fair justice, nor delineate him so that others can be brought to see and appreciate with me this consummate skill in cross-examination of witnesses, without taking more space than I dare devote even to so great a topic. To show him as he was in that trial, and as he appeared to me, would require a verbatim report of the whole case.

The contemplation of his efforts and of the possibilities which were open to me in the profession of the law, convinced me that there were higher vocations in life than being either a doctor or a clergyman, and I resolved that I would take, as my sphere of study and labor, the profession of the law.

I did not, however, give up my studies in physics and chemistry, for I believed that in the profession of the law a knowledge of the wonderfully advancing science of chemistry would be of assistance, especially in the trial of cases of murder by poison. In after life I have found, on more than one occasion, that the capacity to analyze the contents of the stomach of a person claimed to have died from poison, has been of great service; and in civil cases more than once, when the ascertainment of the purity of substances was necessary to the knowledge of facts, has the knowledge of chemistry given me the most valuable aid in the trial of causes.

The winter vacations were made very long, quite the length of the winter schools in Maine, and I taught school each winter at least eight weeks. The stipend was quite small, but it gave aid to expenditures during the rest of the year. I am glad to say, in advice to any young college student who desires to know how best to spend his college vacations, that these winter school teachings were the very best part of my education. In the day school there were spelling classes, and there were two evening classes in the week especially so devoted. Many of these evening classes were given up to competitive spelling, — that is, all the young people in the vicinage came together and competed for prizes for proficiency in spelling. The master gave out the words from the spelling-book, or from any other book he chose, the hard words being always picked out and put to the pupils of the evening classes. Thus the master, of necessity, became of the highest proficiency, and, like Lady Byron's governess, "by teaching learned to spell."

In the hundreds of scholars under my care, all diversities of human nature were exhibited, and from the model I learned the man. I say, therefore, to the students of this generation, that they might far better spend their winter vacations in teaching school than their summer vacations in waiting on flirts at some fashionable summer resort. I do not admire that arrangement of college vacations which enables this employment to be followed. Better return to the old one.

In the third school year, I gave much more attention to the studies of the college course. They were more congenial. The text-book, Wayland's Moral Science, interested me, and in my final examination of the book, I was enabled to recite thirteen pages verbatim.

One portion of the exercises of that year was the reading of Demosthenes' "Oratio de Corona." I do not like to burden my printer to hunt up the Greek letters "Pro Stephanou." The rendering of that oration into good English was a delightful study, and I have a right to say that I charmed my Greek professor in that. But we had, unfortunately for him, a little tiff late in the term. He had an abiding hope of being made professor of rhetoric in connection with our Greek exercises. At the examination before the trustees, he called upon me to read the paragraph commencing "Gar in Hespera." I translated it certainly very creditably.

To show the extent of his instruction, the professor began to ask a few questions in rhetoric: "What is this part of the oration called?"

"The peroration, sir."

"How do you know it is the peroration?"

Of course the proper answer was; Because the orator sums up as his last and greatest effort the arguments that he has used before, so as to put them in the best shape possible to captivate the sense and mind of his audience. Thinking it a good time to get even with the professor, I answered: "Because you told me so, sir."

This reply was to his great disgust, as it made it appear that his best Greek scholar had learned from him nothing but how to read the text. Suffice it to say that he did not get the professorship of rhetoric.

As I have already admitted, my forte in college was not mathe-

matics, and especially mathematical demonstrations by means of the blackboards. My tutor, of whom I have before spoken, remembering my impudence, thought to humble me in the examination in that branch before the faculty. It so happened that I went out, as those who were not being examined were at liberty to do, while the demonstrations of others were being made. When I went into my room, my trigonometry lay open at a pretty abstruse and difficult demonstration, and, while waiting there, I went carefully over it with a memory that would carry every line of it for a while. I had but just returned to my seat in the class when the tutor called out: "Mr. Butler, demonstrate on the blackboard such a problem." By good luck it was the very problem I had just studied. Of course the demonstration was quite perfect. If ever a teacher was thunder-struck at the proficiency of his pupil, it was Tutor Farnham on that occasion. Upon the whole, I graduated 7.5 out of 10 on the general average, prayers deducted.

I had a part, and as I remember it, my dissertation was the worst one I ever made. In the afternoon, after the degrees had been conferred, the graduating class called upon the President, Rev. Robert B. Paterson. For him I had the very deepest regard, and for him and his family in later years I had the good fortune to do several kindnesses. He courteously received the class at the door of his house, offering his hand to each as we came up. We marched up in alphabetical order. It brought me near the head of the line. I held back and did not present my hand, and I have no doubt he supposed it was because we had had some discussion on the evidences of Christianity, wherein I took the liberty to differ from some of his propositions. Neither of us said anything until the rest of the class had passed by him. When I came to my place, 7.5, I said: "Mr. President, now is my turn; 8 has just passed."

"Oh," said he, "Butler, why so formal?"

"Because I am going to take this place in the class for the last time. I mean to take, hereafter, the place I have fairly earned for myself."

FACTS, NOT THEORIES, THE BASIS OF EDUCATION.

BY WILLIAM M. THAYER, FRANKLIN, MASS.

THE world is full of both facts and theories. The facts are divine, while the theories are human. The Bible is a book of facts; there is not a theory in it. Its greatest fact of all is, "Christ Jesus came into the world to save sinners." Life from beginning to end, is a succession of facts. Death is as stubborn a fact as Life. It is quite evident, therefore, that God meant that facts should be the foundation and source of human knowledge and progress; that, from this material, society, the state and church, commerce, education, and character, should be builded. The first thing a child learns, as well as the last, is a fact. His eyes open upon a world of realities — countless objects of fascinating beauty and wondrous power. He has come to enjoy, and profit by, this mission of facts in the "Palace of the Great King"; and every waking moment of his young life is filled with endeavor to become familiar with the marvellous display. Let him continue this process of education, uninterrupted by flimsy human theories, and he will be educated by facts and legitimate deductions therefrom, according to the divine plan.

As already intimated, facts are the basis of education, as they are of political economy and moral science. God furnishes the material, requiring only that man should learn how to use it to the best advantage. The schoolroom is provided and thoroughly furnished, free to all who enter, upon the condition of downright application and perseverance. The method is as simple and easy as God can make it. Man has lumbered it with theories, from age to age, until the chief labor of the true educator is to relieve it of theories and disclose the facts. Dr. Hooker said, thirty years ago, "The study of facts is not only not encouraged, but is absolutely discouraged in our educational system. If anyone like Hugh Miller, impelled by the force of a taste that cannot be repressed by the training of the schoolroom, undertakes to make a right use of his eyes, and curiously examines stones and seeds, he

is regarded by the world of spellers and readers, and grammarians, and cipherers, as a strange genius. But he is pursuing, from an irresistible internal force, the very course that I would have every student encouraged to pursue, in a measure, at least, by the external circumstances of his education. The tendency of his training should be decidedly in this direction."

It is singular that men, who are ushered into this world of facts, should spend so much of mature life to make it a world of theories. Theories are everywhere — theories true and false, wise and otherwise, rational and crazy. Those only which stand upon facts are reliable. Whether in science, art, literature, politics, education, religion, or what not, theories that are not based upon facts are without foundation. For facts furnish, not only the material of education, but the ground-work of all reliable theories relating thereto. Surely, "facts are stubborn things." They are "irrepressible." We cannot get rid of them.

It is as easy for the "stubborn fact" to upset the false theory, as for the sun to shine, or winter to be cold. A medical gentleman of real intellectual ability was discoursing upon "the necessity of alcohol to the highest physical development." He asserted positively that the necessary mission of alcohol is a better physical development of man. A clergyman among the listeners inquired, "Do you believe the Bible, sir?" "Certainly I do, as sincerely as yourself," was the prompt reply. "If your position be correct," continued the clergyman, "what can you do with the fact, that, when God would make the strongest man who ever lived — Samson — He commanded, not only that he should be a teetotaler, but, also, that his mother should be a teetotaler before his birth, lest some taint of physical weakness should attach to him? God discarded alcohol in giving to the world the best example of physical strength on record — how well you explain it?" The Doctor was silent. His theory, supported by hundreds of scientists as wise as himself, was upset by a single fact.

We venture another illustration on this point. Two or three years before the death of Professor Agassiz, he spent several weeks, in summer, at Cotuit Port, Mass. His object was recreation, also the collection of specimens of fish in the waters of that vicinity for his grand museum at Cambridge. One day, in company with several citizens of the town, the Professor was asked if he had seen a certain fish, (the name of which we cannot now

recall) which swims in "schools" with one fin out of water. He replied in the negative, whereupon a gentleman inquired, "Which fin is out of water, the back or tail fin?" Without the least hesitation, the Professor answered, "Oh, the back fin, of course," evidently deciding the matter by some general theory of his own or another's. A lad of ten years was standing by, eagerly catching every word of the distinguished naturalist — one of the bright, sharp observers whom we find among boys — and he spoke out, in his earnestness, "I think it is the tail fin; I've seen 'em." A laugh followed, when Professor Agassiz placed his hand upon the head of the boy, adding words of encouragement, and telling him, that, when he became a man, he hoped he would know all about it. But this was gammon to the observing little fellow; he would set his fact over against the Professor's theory any day; that is, if he had the fact. The following day, the lad went down to the wharf, several rods back of the hotel where the Professor was stopping, and laid himself flat on his face to watch for the back or tail fin. Four hours the persevering boy waited there for a "school" of fish, but no fish appeared. On the next day he was promptly at the spot, and waited nearly as long, but in vain. Nothing daunted, he was there again on the third day, and scarcely had taken his position when a "school" of the coveted fish put in an appearance, swimming directly under the wharf in full view of the two staring eyes watching for them. Judge of his excitement and delight, when a good, square, searching gaze proved that the *tail fin* was out of water! Quickly as his feet could carry him, he bore the intelligence to the Professor at the hotel, not that "the tail fin is out of water," but "a school of them fish is in the harbor"; and down the latter hurried to see for himself. Sure enough, the tail fin was out of water! Agassiz beheld the fin with his own eyes. The ten-year-old boy with his fact had discomfitted the Professor with his theory.[1]

In the two great fields of thought, Education and Religion, perhaps, there never were more theories in circulation than in our day. It is claimed that there are twenty-eight theories of the Atonement advocated now, when the Atonement is not a theory at all, but a stupendous FACT. Unless it be a *fact*, Christianity is a myth. In Education, theories outnumber those in Religion.

[1] The author received this incident from a Boston gentleman whose summer residence was at Cotuit Port.

Nor is this state of things to be wholly deprecated. It is an age of research and close investigation, and, therefore, of real progress; and speculation is, on this line of progress, indispensable, though often erratic. The outcome will be a standing on the bed-rock of facts. Already we have satisfactory proof of this; as in the opening of colleges to young women, and welcoming them to scores of life-pursuits from which they were formerly excluded. There was a time when "common sense was the most uncommon kind of sense"; but that era is fast passing away. Common sense is getting to be about as common as other common things. Its reign will be triumphant when the education of man's three-fold nature is according to fact.

Speaking of common things recalls the following from the pen of Miss Alling, whose experience in the schoolroom gave authority to her words. "Children spend from half an hour to two hours every day for ten years in the study of arithmetic. What are the results of so much labor? In nine cases out of ten, they can neither write a note or receipt, make out a bill, compute simple interest with accuracy and dispatch, nor keep correct records of any business transaction. The rules learned and the examples wrought seem to have little relation to the after life. Nearly as much time is spent in spelling. In most schools children are required to do what we saw done a few weeks since; a class of bright boys and girls spelled from forty to fifty hard words accurately, but on being asked the meaning of those words, only three of the children ventured any answers, and among them four words were defined. Of what use is it to commit to memory a combination of letters that is meaningless, a mere symbol without the idea signified? . . . . We instinctively revolt against lumbering the mind and wasting time so foolishly; but when did we become so unlike the children we teach? Every time a child is asked to remember what is to him a meaningless word or sentence, he is defrauded of the possibility of gaining, in that same time, some *fact* or expression of truth that might be of real service to him; and these losses he cannot make up in after years."

Miss Alling's remarks recall an incident of our pedagogic days, when we organized a class of over twenty in book-keeping. One of the number, a youth of sixteen, had attended a celebrated "Commercial College" a whole year. In the outset the ability of

the class was tested by requiring them to write a promissory note for one hundred dollars. Not one of the number could write it. "Write a receipt for one hundred dollars." Only one — a farmer's son — could write it. "Write an order for one hundred dollars." No one could write it. "Make out a bill to me for ten yards of cotton cloth at ten cents a yard, fifteen pounds of sugar at eight cents a pound, and two pounds of coffee at thirty cents a pound; and receipt the bill." No one attempted to make out the bill except the boy who had attended the Commercial college; he wrote it correctly. "What is book-keeping?" The pupil who made out the bill gave the definition in his book. "What is the advantage of book-keeping, if you do not learn how to write the papers used in the common transactions of life?" A broad smile was the only answer. It was quite evident that all the members of the class saw the point, especially the youth who had made book-keeping a study for a whole year. He could repeat definitions, all there were in his text-book; and, being an excellent penman, he could copy forms in fine style; but so far as real practical knowledge was concerned, he was almost as ignorant as a child. He had not been instructed at all in the *facts* of business life. Pursuing that line of study, he never would or could have known how to keep accounts correctly. But there has been decided improvement since that day, the people having become more in love with facts.

The little child demands facts. Read him a story, and he asks, "Is it a truly story?" He wants neither fiction nor theory. His education begins well. Thirty years from now, however, with many elderly people, he may prefer fiction to fact. He learns to speculate and theorize with advancing years, when he ought to become more and more the student of facts. Theories belong to manhood and womanhood, not to childhood. Stephenson did not dare to say to a committee of parliament that his locomotive would run more than ten miles an hour, though he knew it would run twenty. He feared that M. P.'s who were wedded to theories might hoot at, or snub him for his fact. Copernicus proved that the world was round, and a papal bull was hurled at his head. The people preferred the old theory that it was flat. Gallileo taught the annual and diurnal motions of the earth; and he was rewarded for the fact by a dungeon. Harvey announced the truth about the circulation of the blood, and lost much of his

medical practice, and the good opinion of physicians, and others above forty years of age, for divulging the fact. The Greenwich pensioners, looking out from their palatial house upon the Thames, and beholding the first steamer, said, "We do not like the steamboat; it is so contrary to nature." They blundered in putting *nature for theory*. When Fulton was building his steamer at New York, he was ridiculed by even the wise and good. "It cannot be done," they said. And when it was done, and the wonderful craft sailed triumphantly up the Hudson, the fact was so contrary to their preconceived theories, that many of them would not accept it. It was so with the telegraph, the Atlantic cable, and the telephone. It took a long time to beat these facts into many human heads, because theory held them in its grip. But these facts triumphed, as all other facts will finally triumph.

THE NIGHT WIND.

BY G. T. JOHNSON, KANSAS CITY, MO.

Hark! hark! 'T is the night wind
  Sighs against the pane!
List! list to its accents!
  "Hope, hope comes again."
Blessed are its tidings,
  Its accents sweet and clear:
"Watch, watch for the morning!
  See! now it is near!"

Hark! hark! 'T is the night-wind!
  List to its sobbing song:
"Work! work on with patience;
  Night will not be long."
Blessed are the tidings,
  It bringeth me to-night:
"Work, work 'till the dawning;
  Rest comes with the light."

Hark! hark! 'T is the night-wind!
  List! it speaketh again:
"Work! work on in silence;
  Think not it is vain:

God watcheth the reapers
  That harvest His grain;
Soon He will reward you;—
  Joy! joy for your pain."

Hark! hark! 'T is the night-wind
  How welcome its song!
List! list to its teaching:
  "Peace cometh ere long.
Wait! labor with patience!
  Darkness soon will be past;
DAY dawn with great glory;
  Joy crown you at last."

THE NEW NORMAL SCHOOL BUILDING AT BRIDGEWATER.

PRINCIPAL ALBERT G. BOYDEN.

MASSACHUSETTS was the first state on this continent to establish normal schools for the training of teachers for her public schools.

The school at Bridgewater was one of the first three state normal schools in America. It was opened in September, 1840, and its first principal was Nicholas Tillinghast, a graduate of the United States Military Academy at West Point; a man admirably adapted to this pioneer work, whose strength of character, and untiring efforts for thirteen years established the school upon a broad, deep foundation.

Marshall Conant was the second principal, who continued the good work of his predecessor for seven years. He was then succeeded by the present principal who is now upon his thirty-second year in this service.

The first six years of its life the town of Bridgewater provided the school with a home in the town hall. In August, 1846, the school moved into a new building, the first one on this continent erected for a normal school, a plain edifice of the Tuscan order, 64 x 42 feet, two stories in height, constructed of wood and costing $8,000.

The growth of the school made it necessary to enlarge this building in 1861, again in 1871, and still again in 1881. At the

end of fifty years the school had outgrown all these enlargements and the new building shown by the cut above, a large and handsome edifice, was erected.

It is a massive structure eighty-six feet in front by one hundred eighty-seven feet in length, three stories in height above the basement, and stands on the westerly side of a square of three acres which is bounded by School, Summer, Grove, and Maple streets. It has a commanding position, eighty feet back from School street, on which it fronts, and faces north-east so that the sunlight comes into every room. It rests on a foundation of Quincy granite. The walls are faced with water-struck brick of a rich red color, and the limits of the stories are marked by bands of mottled, buff brick, capped with blue marble from West Rutland, Vermont. The architects, Messrs. Hartwell & Richardson, of Boston, have shown excellent taste in the design of the building, and the contractors, Darling Brothers, of Worcester, have constructed it in the most thorough manner.

The front entrance is through an open porch with three massive arches into an ample vestibule, from which stairways ascend on each side of the porch in cylindrical towers. A corridor, spanned by eight fine arches, extends through the middle of the entire length of the building to the southwest entrance. There is a third entrance into the corridor at the middle of the west side

through an open porch. Stairways ascend from the western entrances to the attic, affording a safe egress from all parts of the building. The north half of the first floor is occupied by the ladies' cloak-room, gentlemen's coat-room, two rooms for the library, and a retiring room for the lady teachers and pupils.

The remainder of the first floor, including four large rooms with three smaller class-rooms adjoining, is devoted to the model school, composed of four primary grades and four grammar grades, and numbering one hundred and seventy-five pupils.

The basement story is one-half above ground, and a corridor extends lengthwise through the middle of it. It includes lunch-rooms for the students who come daily on the cars, and toilet rooms for the normal students; play rooms and toilet rooms for the model school; the fan room and the heating chamber, store-rooms, and the gymnasium 29 x 71 feet, with its dressing-rooms adjacent.

Ascending to the second floor, from the vestibule, are two passage ways leading to toilet rooms for the gentlemen and lady teachers, the principal's room, and the assembly hall, a beautiful room which extends entirely across the building, eighty-two feet in length, fifty feet in width, and seventeen feet in height, seating two hundred and fifty students. At the middle of the south side of the hall a double door opens into the corridor leading to the class-room for languages, four large laboratories for the natural sciences, two teachers' laboratories, an apparatus room, and the library for text-books.

The front stairways lead to a corridor extending lengthwise through the middle of the third floor. This floor includes, on the right, the principal's class-room, a double room for drawing, the two chemical laboratories, elementary and advanced, with the teacher's laboratory between; on the left, two class-rooms for mathematics, one for vocal culture and reading, the physical laboratory, and lecture room, with the teacher's laboratory between them.

The rooms are large, light, sunny, fitted with tables and chairs, drawers, cupboards, and cabinet cases, arranged in the best manner for practical work. The institution has large collections of working specimens, and cabinets of classified typical specimens for use in the daily work.

The building is heated and ventilated by the fan system. The air is driven into the rooms, and out through four large ventilat-

ing shafts. The rooms are kept at a uniform temperature by the Johnson heat regulator.

In the simplicity of its arrangement, its adaption to school wants, and in all its appointments it is a model building of which the state may justly be proud. Its cost is $150,000.

The school has a notable history, an able corps of instructors, and offers excellent advantages to men and women who desire training for the teacher's profession.

THE OLD AND THE NEW IN EDUCATION.

BY JESSIE M. ANDERSON.

Author of "Lessons for a First Year in English Grammar."

IN his essay on Culture, Emerson remarks that after visiting the Exhibition of the Industrious Fleas, the hardiest skeptic will be forced to belief in education. If the somewhat limited intellect of the brightest flea be measured against the mentality of the stupidest child you know, it will seem worth while to educate the child. And if you may expect a *proportionate* degree of gain, the result is quite incalculable.

But in these days and in this country, the question is a different one; not, Is general Education worth while? but, What direction shall it take?

Every one nowadays who talks about education at all asks what the Greeks did. Macaulay puts the answer into a short, vivid paragraph:

"Books, however, were the least part of the education of an Athenian citizen. Let us, for a moment, transport ourselves in thought, to that glorious city. Let us imagine that we are entering its gates, in the time of its power and glory. A crowd is assembled round a portico. All are gazing with delight at the entablature, for Phidias is putting up the frieze. We turn into another street; a rhapsodist is reciting there; men, women, children are thronging round him; the tears are running down their cheeks; their eyes are fixed; their very breath is still; for he is telling how Priam fell at the feet of Achilles, and kissed those hands, — of the terrible, — the murderous, — which had slain so many of his sons. We enter the public place; there is a ring of

youths, all leaning forward, with sparkling eyes, and gestures of expectation. Socrates is pitted against the famous Atheist from Ionia, and has just brought him to a contradiction in terms. But we are interrupted. The herald is crying — 'Room for the Prytanes.' The general assembly is to meet. The people are swarming in on every side. Proclamation is made — 'Who wishes to speak!' There is a shout, and a clapping of hands; Pericles is mounting the stand. Then for a play of Sophocles; and away to sup with Aspasia. I know of no modern university which has so excellent a system of education."

Now its excellence lies in two points; its wideness of range, and its immediate interest; and the combined result is a wide-awake type of mind.

Accordingly it is not in the lack of books, that we are to copy the Greeks, or in any other circumstance which could not hinder but did not cause their success; nor is their only lesson for us, to bring physical culture into the foreground, as certain base-ball nines would have us imagine; but we must infuse into our educational life these two elements; we must make education liberal, and we must make it of immediate interest.

Practically these requirements are both met in the study of the questions of the day. The Athenian boy felt that he must help decide the questions of his day; and these were never mere matters of speculative criticism, but always of decisive taste and judgment. Not, Is this play, or this statue, justifiable on abstract principles of art? but, Shall we accept or reject it? Not simply, Is this oration good oratory? but, Will its proposed measures avert public calamity?

Our present questions are not less wide or less absorbing. But the attention of our youth is divided, and a large share necessarily given to work that is distinctly literary or abstractly critical.

Our plea now is just this: Let a fair share be given to the study of the latest thought and the latest attainment.

In the region of books, — our boys and girls must be trained to use the taste already cultivated by the best classical literature in the discriminating study of what our best modern writers are doing, — in poem or novel or magazine article. They must understand once for all that the new is not the old, and not an imitation of the old; they must see that the difference is vital; they must be trained to help on the tendency in it that is good, and to fight the tendency in it that is bad.

For instance, our fiction is depending less on plot and more on metaphysics. Here is a distinct tendency, on the one hand, to make morbid writers and morbid readers. We have the novel that depicts the heroine's spiritual struggle over a mood of the blues in the tragic colors of Aeschylus. Our young people should be educated to the point where they will put this book aside with voluntary disgust. The other side of the tendency is to displace the old thirst for royal pageants and masked knights by an interest in the every-day and trivial lives of commonplace people. Our youth must be trained to get this best thing out of modern fiction, and to enjoy Miss Alcott's *Little Women* and Mr. Howells' short stories for boys.

Again, our science is so changed from the old as to be almost a new factor. The literature of science has been wonderfully simplified, and there is hardly a department that does not offer books full of absorbing interest to boys and girls; from Miss Merriam's *Birds through an Opera Glass* to Prof. J. B. Clark's charming little work, *The Philosophy of Wealth*, which makes perfectly clear to an intelligent boy or girl of sixteen, the fundamental principles of that most complicated and abstruse chapter of science, political economy.

To enjoy these books and to be educated by them, our boy or girl must be trained to put down the book that makes the subject entertaining at the expense of truth or depth; and take keen pleasure in the one that develops his eye-sight and his ear-hearing and widens his thought. Such a boy or girl will have all the best qualities of the Athenian intellect; he will be awake to the pleasure given him to enjoy in his natural life, as he listens to the bird-songs or revels in the color of the worm or the form of the weed-blossom. He will have the Athenian interest in questions of state, for his political science will make him listen to his father's talk on the labor debate. And his geography and geology will inform him that the world is large around him and has been long before him.

In religion this recognition of what is good and what is bad in new movements is most important. The tendency to change is strongest here; the good must not be lost in rejecting the bad. The worst in the tendency is to do away with faith in the supernatural; the best in it is to simplify creeds and to make our religion clearer and more reverent, as scientific method clarifies

our thought and reveals more fully the wonders of the supernatural.

Professor Drummond's address on The Greatest Thing in the World is the outcome of a religious reverence deepened by scientific research and simplified by scientific training.

But if we are to get the best out of Athenian culture, we must not neglect the more specific forms of artistic study; and no one can doubt the wisdom of introducing some of this training into every child's school-life.

The kindergartens are taking the early steps in this direction. They give the little ones a chance for developing their taste in combining colors, and their skill in using lines and curves; the children mould the soft clay into simple forms, and draw easy outlines or learn to produce light-and-shade effects with their bits of charcoal.

Sometimes in the higher schools the pupils are taught enough of the principles and practice of drawing and painting and modelling to appreciate a "finishing year" on the history of art; all this must give them some insight into the value of art-galleries and some correct appreciation of the best pictures and statues everywhere.

In a few schools a like training is offered in musical study. Beginning with the most simple reading and singing of well selected exercises, with frequent *musicales* — in which a good performer may play selections of the choicest classical piano-music or render vocal numbers, accompanying the exercise with short lectures and comments, — after a few years the result will be quite remarkable. A whole senior class, though only a few members have taken special courses in vocal or instrumental practice, will be found able to tell good music from bad; to appreciate the best qualities of the music and of its rendition in a good recital.

In the more strictly technical parts of education, there is no tendency to neglect current methods. The farmer has his new combination cutter, reaper, and binder, and the census-maker has a slot-machine. The typewriter and the reporter are not often an hour "behind the times."

Everything that is new seems to be trying to "break the record" in point of time; and in these days, of those two mottoes that used to hang on the walls that surrounded our early educational processes, KNOWLEDGE IS POWER has fallen face down-

ward to the floor; while its rival, TIME IS MONEY holds sway over every ambition. But only when some sort of balancing is effected between these opposite forces, will education — conservative in what is good and progressive in what is good — become symmetrical.

VON ASBETH ON THE CLASSICAL QUESTION.

SPEECH IN THE HUNGARIAN DIET, BUDAPEST.

(Translated from the German in Pædagogium.)

BY D. LANGE, ST. PAUL.

IF educators throw the study of Greek, that is, the ancients themselves out of the Mittelschule,* which means out of the national education, then they rob the nation of something which no other study can supply.

Then at a time in which even religious ideas are shaken, there will arise a generation that has lost all connection with the past, a generation that will deem it useless to inquire where their grandfathers were buried, and will much less care to know for what they lived or died.

A generation will spring up, gentlemen, who, from the lofty height of their enlightenment, will look down with pity and disdain upon the antiquated prejudices of their ancestors. And with strictly logical sequence, this generation must sooner or later arrive at the conclusion that reverence for parents can rightly be demanded only as long as parents are directly useful. Thus will come into existence a society that is indifferent alike to the past and the future, a society whose only ideal will be pleasure, ease, and "pocketable" gain.

And when this Americanism, this western materialism and greed of gain, without the feverish activity of the West joins hands with Oriental indolence without the frugality and contentment of the East, as would happen here; then, gentlemen, nothing but a degenerate race can be the result of this connection, but never a nation.

The Hungarians, gentlemen, in accordance with their number and proud spirit, will not stoop to play any other role but that of

* By Mittelschule are understood the Gymnasium, the Realschule, and similar institutions.

a nation. It is my conviction that Hungary would make a most serious mistake to imagine that she would be able to exist as a state of second or third rate, not minding her neighbors and not being minded or disturbed by her neighbors. It would be impossible for us, taking into consideration our geographical and ethnographical position and our comparatively small numbers, to maintain an independent state in this part of Europe where we are forced to live and die. A so-called neutral middle state has never been able to exist for any length of time in southeastern Europe. Hungarians will either occupy a fitting position in a large empire upheld by themselves, or they will become merely a suppressed and insignificant nationality. Intellectual excellence only, the greatest exertion put forth in this direction, can counterbalance our inferiority in numbers.

But with this mission, gentlemen, it does by no means agree that we exclude from our national education those studies in which intellectual excellence shines forth most splendidly, which teach the knowledge of the human heart and the human soul, the progress and destiny of man to a degree never attained by other subjects.

Gentlemen, we need not underrate our own time. This age, with its technical achievements, with its inventions which from day to day revolutionize our mode of life, calls forth our admiration. This age deserves indeed to be called great on account of its irresistible energy and activity. But it is evident that an age of electricity, of overland flyers, of "Zonetariffs," of the nerve-attacking telephone, cannot be a time of intellectual concentration. It cannot be a favorable age for harmonious contemplation on man and the world in general. The ancients, on account of their far more simple conditions of life, were in a far better position to reflect and meditate on man himself. This is the reason why the fountains of wisdom, of law and art are principally found in Greek civilization, beside which even the Romans present only an imitation, a second-hand civilization. Even our material development draws on these treasures today. I grant that we have gained much new information and gain more every day, but scarcely have we evolved any new ideas. Through this intellectual concentration the history, the law, and the arts of the Greeks became so instructive, so sublime, through this the understanding of man's heart and soul grew so deep and true. All

this, however, can only be assimilated as long as the battle of life has not disqualified us for receiving deep impressions. In later life harmonious mental concentration becomes impossible. After the strong passions of youth have arisen, when the battle for existence must be fought, after the daily routine of two times two is four, after the coarse prose of cash gain have entered a man's life; then it is too late to assimilate all this. And even if one were to attempt it, yet it would only be done with much greater labor, exertion and loss of time, or only through the medium of stale, insufficient translations.

Finally, gentlemen, to say that the mental exertion is too much for us Hungarians, that, gentlemen, is a downright pernicious argument, an argument nipping national ambition in the bud. That would not be the proclamation of intellectual vigor, but of intellectual inferiority; it would not only be abandoning the mission to lead others, it would be surrendering our place among civilized nations.

THE RISE OF MATHEMATICS IN THE UNITED STATES.

BY PROF. FLORIAN CAJORI, COLORADO SPRINGS, COL.

THE success attained during the last fifteen years in the study of higher mathematics in the United States adds general interest to a survey of the path of ascent to the present elevated position occupied by American mathematicians. This ascent has been a slow one. During the years past the genius of the American people was exercised mainly in achieving material progress and the cultivation of pure science was neglected.

That mathematics did not flourish during colonial times is not surprising. When Harvard College was founded, in 1636, mathematical research in Europe was fostered by such master-minds as Cavalieri, Torricelli, Pascal, Fermat, Roberval, Descartes, and Wallis, but as yet it had hardly reached the universities of Europe. In Cambridge, England, "there were no mathematical studies at all at that time . . . and none to give even so much as advice what books to read." Need we marvel that Cambridge in New England was not mathematical from the start? The fountain could not rise higher than its source. It must be remembered,

moreover, that since the prime object of Harvard and other American colleges was to train young men for the ministry, much attention was given to ancient languages and metaphysics, while mathematics was neglected. Thus, before the middle of the eighteenth century, no mathematics whatever was required for admission to Harvard and Yale, nor was it studied except during the last year of the college course, when the budding theologians did homage to the mathematical science by the study of arithmetic, elementary geometry (consisting chiefly of a course in surveying) and a little astronomy. Some time before 1750, mathematics was, at least, dethroned from its august position as a senior study and assigned an humbler place at the beginning of the college course. No mathematics whatever was required for admission at Harvard until 1803. At that time students began to be examined in arithmetic "to the Rule of Three." In most other colleges this requirement began to be made at a much later date.

Algebra was an unknown science in America during early colonial days. It appears to have been introduced at Yale in 1742 and at Harvard at about the same time. But at a still earlier date (on or before 1724) it appeared in the course at William and Mary College in Williamsburg, Virginia. Favorite text-books in New England colleges from about 1700 to about 1776 were Alsted's Geometry, Euclid's Geometry, and John Ward's Mathematics. All these books were imported. The era for the writing and printing of college text-books in the United States had not yet begun.

Newtonian ideas were slow in finding their way into the new world. To be sure, at Yale that young and progressive tutor, Samuel Johnson (afterwards president of King's, now Columbia college) taught the Newtonian doctrines between the years 1715 and 1722. He mastered them from a copy of Newton's Principia which was in a collection of books made in England for the college, and which furnished him with a "feast of fat things." Soon after the departure of Johnson, a retrograde step was taken by the adoption at Yale of the Physics of Rohault, a follower of Descartes. The edition used was that of Samuel Clark, an Englishman who added numerous notes with a view of bringing the Cartesian system into disrepute by exposing its fallacies. The same work was used at the university of Cambridge, England. At Harvard, Gassendi's astronomy was used in 1726. Thus, forty

years after the publication of Newton's Principia, an astronomy was used in Harvard, the author of which died before the name of Newton had become known to science. In 1743 the complete victory of Newtonian ideas at Yale (and at about the same time at Harvard) is seen in the adoption of Gravesande's Philosophy as a text-book.

During colonial times no original work was done in this country in pure mathematics, but some interest was shown in astronomy. The most distinguished astronomer of this period was David Rittenhouse of Germantown, Pa. He was entirely self-taught and one of the very few men of his time who pursued science out of pure love for it. On the third of June, 1769, he observed the transit of Venus in a temporary observatory constructed by himself, and he took notice of one phenomenon which escaped the attention of everybody else; namely, when the planet had advanced about one-half of its diameter upon the sun, that part of the edge of the planet which was off the sun's disc appeared illuminated, so that the outline of the entire planet could be seen. That proves that Venus has an atmosphere. This observation of Rittenhouse excited no attention for nearly a century, until it was at last confirmed by other astronomers. Rittenhouse was celebrated for the wonderful orreries which he constructed.

The progress of mathematics since 1776 may be divided into two periods, the Influx of English mathematics and the Influx of French mathematics. With the first period began the writing and printing of mathematical books among us. The number of arithmetics alone, printed before 1820, exceeded sixty. Many books were reprints of English works. All American compilations were modelled after English patterns. The English algebras of John Bonnycastle and Thomas Simpson, Robert Simson's and Playfair's editions of Euclid, Vince's Fluxions, and Hutton's mathematics were books found in libraries of American professors. The English are thus seen to have been our teachers, although they themselves were then far behind the mathematicians of the European continent.

The first American who compiled a course of mathematics for colleges was Samuel Webber (1801), professor at Harvard. In 1814 Jeremiah Day of Yale began the publication of a popular mathematical series. These series did not include fluxions. Occasionally students advanced far enough to enter upon the ele-

ments of that subject, but this was of rare occurrence. During this period, mathematical instruction was still very inferior in quality. As a rule pupils took no interest in mathematical studies. The professors themselves never felt the glow of a new idea and were, often, quite incompetent. The text-books taught rules rather than principles.

In 1804 was started the *Mathematical Correspondent*, the earliest mathematical journal in this country. Like several other periodicals which sprang into existence soon after, it had only a short life. These periodicals were devoted almost exclusively to the solution of elementary problems and were, therefore, of merely educational value. Nothing in them added to the stock of mathematical knowledge, excepting a paper by Robert Adrain in No. IV. of the *Analyst*, containing deductions of the Law of Probability of Error in Observations. This law was first stated in printed form by Legendre in 1806, but Adrain, working independently of Legendre, was the first to publish proofs of this law, of which he gave two. Until recently Adrain's work was quite unknown.

The most distinguished mathematician of this time was Nathaniel Bowditch. Like David Rittenhouse, he was never in college either as teacher or pupil, but was wholly self-taught. He may fitly be called the morning-star of American mathematics. With him began a new epoch, the influx of French mathematics. Trained in the school of poverty, possessed of indomitable energy, he mastered, while on long sea-voyages as a sailor, one branch of mathematics after another. Later in life he was an officer of insurance companies. He was the first American to study French works. In 1801 he published his "Practical Navigator" and in 1829 began the publication of his translation and commentary of Laplace's Méchanique Céleste. At this time French and Swiss authors came into ascendency among us. Professor Farrar of Harvard translated Lacroix's Algebra, prepared an introduction to the elements of algebra selected from the algebra of Euler, translated Legendre's geometry, Lacroix's Trigonometry and Bezout's Differential and Integral Calculus. These books appeared bebetween 1818 and 1824. At this time Euclid came to be discarded almost everywhere in favor of Legendre or similar works. In the United States Military Academy at West Point, the most prominent professors were French and Swiss, or Americans who had

studied in France. The course of study at that institution was modelled somewhat after the courses at the Polytechnic school in Paris. The United States Military Academy was, during this period, the most influential mathematical school in the country.

The period of the influx of French mathematics, which began about 1820, was a bright one as compared with the preceding. Mathematical journals now occupied a higher level of merit. Marked improvements were made in the text-books and in methods of teaching. Pestalozzian ideas found their way into elementary schools. The introduction of the black-board doubled the instructor's power of teaching. The government established the United States Coast Survey, of which Ferdinand Hassler, trained in the niceties of this line in Switzerland, was first superintendent. This work has been carried on with a high degree of efficiency under Alexander Bache and the later superintendents. An astronomical observatory was founded by the government in Washington in 1842. Before this time Congress had repeatedly refused an appropriation for an observatory. Once President J. Q. Adams, in one of his messages, urged this matter upon Congress, saying that in Europe there were "upward of 130 light-houses of the skies," while in America there was not one. His eloquent appeal was received with a torrent of ridicule; and the scheme to establish a light-house in the skies became a common by-word of reproach. It need hardly be said here that in later years the United States government has been very liberal in the aid of science.

Notwithstanding this progress in various directions, the achievements were small indeed as compared to those of European countries. Ours was not the glory of the sun, but of the moon. we imitated the French in some of their text-books, but we failed to catch their enthusiasm and to display originality of thought. The only really prominent mathematician of this period was Benjamin Peirce, professor at Harvard (died 1880). Professor Arthur Cayley calls him the father of American mathematics. His text-books for colleges were concise and elegant, and so full of novelties that they never became widely popular. A much wider circulation was enjoyed by the works of Charles Davies and Elias Loomis. Peirce's Analytical Mechanics is an advanced work of much merit. His memoir on Linear Associative Algebra secures for him lasting fame. It is by far the most important

original contribution to pure mathematics made in this country. Peirce did much work in mathematical astronomy. Distinguished in this line were also William Chauvenet, the author of a Spherical and Practical Astronomy, of a Trigonometry, and of an elementary geometry (all excellent works), — and James C. Watson, author of a Theoretical Astronomy.

It was a fortunate circumstance for the progress of mathematics in the United States that when Benjamin Peirce was near his grave, there came to our shores an eminent mathematician to give new impetus to mathematical studies. This man was Prof. James Joseph Sylvester, who in 1876 came to the Johns Hopkins university in Baltimore, and during his seven years' stay there, by his genius and enthusiasm, inspired young men for the study of advanced mathematics. He was the first editor of the American Journal of Mathematics, the first periodical of its kind among us, which is devoted to higher mathematics exclusively. Sylvester may be said to have inaugurated a new epoch in the progress of mathematics in this country. The number of men engaged in the study of advanced mathematics at the present time is far greater than it was at any previous period, and it can now no longer be said, as was said, that but a single important original contribution to pure mathematics has been made in America.

EDITORIAL.

WE are sure our readers will enjoy the feast of fat things which we are privileged to lay before them this month. Such writers as Edward Everett Hale, General Butler, Rev. Wm. M. Thayer, and Principal Boyden need no introduction to any American audience. The other writers in this number, while less widely known, are all able to interest and instruct.

SOME of our readers have already availed themselves of our offer to send EDUCATION two years *free*, or advance their dates of subscription *two years*, on receiving a cash order for that choice set of volumes — the "Library of American Literature." Turn to the Bulletin Board and read our offer.

GEN. BENJ. F. BUTLER, — from whose forthcoming autobiography we are permitted, by the courtesy of the publisher, to publish an article — has long been a conspicuous figure. Few living men have as many warm friends or more bitter opponents. He has never done

things by halves. Whether men love him, or hate him, they will read his book, — which will appear the last of this month, — with absorbing interest. Of the friends of Butler among the warmest are the negroes of Virginia. With many of them he holds a place higher even than that accorded to Abraham Lincoln. Gen. S. C. Armstrong of the Hampton Institute, in a letter which we have just had the pleasure of reading vouches for the following: Preparatory to Hampton Institute is the "John G. Whittier school" in which three hundred colored children gather daily from the neighborhood. One day General Armstrong went in and began quizzing them: "Children! who freed the colored people?" Up went the little dusky hands. "Well?" "Ben Butler." "Who was the Father of his Country?" "Ben Butler!" "Who never told a lie?" Answer, in full chorus, "Ben Butler!"

LAST summer for the first time in the history of university work, the University of the City of New York conferred pedagogical degrees; fourteen graduates receiving the degree of Doctor of Pedagogy, and twelve that of Master of Pedagogy. The average age of the doctor's class was over fifty years, but all had been faithful students of educational science for four years and had amply earned the honorable distinction they received. No class ever graduated from any university since time began, the average age of whose members was so great as this. Most of the members of both of these classes are principals or heads of departments in New York and surrounding cities. Since the commencement of lectures on pedagogy, four years ago, more than five hundred teachers have been in attendance; a School of Pedagogy has been organized and endowed as a department of University work; a definite course of study marked out, a good library commenced, free text-books pledged, and definite degrees promised. Education is now recognized as equal in professional rank to law, medicine, and theology. Lectures are given five days each week at four o'clock, and on Saturdays at ten o'clock from October to May, to accommodate those engaged in teaching. This is an auspicious omen for the future of pedagogy.

EDUCATION receives a great many warm words of praise. We seldom publish any of these as we think the magazine is abundantly able to stand on its own merits. But perhaps we may be pardoned for quoting the following from the Boston *Transcript* of Oct. 17, 1891, concerning the last number: —

"Larkin Dunton, LL.D., contributes Part V of his admirable, and what will undoubtedly prove a standard work on "Moral Education." "The Woman Problem," by Elizabeth Porter Gould, is suggestive and to the point. Though brief, it contains much valuable information,

pressed home with hope and vigor. William C. Kitchen's paper entitled "Three Centuries of European Learning in Japan," is a revelation. Verily, the education of civilization is fast overcoming a benighted world! The same will apply to the astonishing account, given in full detail, in the second installment of Arthur Inkersley's article on "Primary Education in New Zealand." "Political Economy in Schools," by Prof. W. E. Burchill, Denver, Col., is a paper of vital and primary importance, treated with commensurate ability. L. Richards, Washington, D. C., contributes a paper entitled "Teaching, Training, Instructing, and Educating," which it is the duty of every board of school committees and every teacher to read attentively and ponder well. The cause of education will receive an impulse in the right direction if this is done. It is very brief, but contains volumes. Laura Saunderson Hines, A. M., contributes an interesting and instructive paper entitled "Mediæval England as Seen in Her Ballads." An exquisite poem, "The Artist," by Retta A. Hoyles, follows. Editorial work as usual, which is all that is necessary to say of this excellently conducted magazine."

ONE of the most significant of the recent educational movements in Boston has been the inauguration of the Boston Training School of Music, with headquarters at Music Hall building. The inaugural exercises were held on the evening of October 7th, and consisted of a series of musical performances by the professors of the institution, with addresses by the director, Mr. George H. Howard; Pres. C. W. Emerson, of the College of Oratory; Supt. William A. Mowry; Hon. Charles C. Coffin, and Rev. A. D. Mayo. The faculty consists of the director and twenty-two assistants, and offers the usual attractions of this sort of conservatory. But the special interest of this new school for educators is the Normal Department, a special course, kept apart from the other courses, requiring special preparation in music, and, at least, one year of a high school course or its equivalent, with a separate diploma. The character of its director, Mr. Howard, and Dr. Larkin Dunton, lecturer, is a guaranty that this department of the training school of music will be in fact what it professes. With no disparagement to other conservatories or private teachers, this seems to us a positive new departure in musical education, worthy of notice by the general educational public. Nowhere has the chronic disparagement of pedagogy by the college and university corporations of the country borne more disastrous fruit than in musical education. The time-honored conceit, that a well-instructed college graduate is at once competent even for an advance position as teacher, has been adopted by our leading instructors in music, who have laid the chief emphasis on knowledge and skill of performance, sending forth their pupils with no conception of professional skill as teachers. Here, as elsewhere, the common school system has led the reform in the training given by the state and city normal schools to their gradu-

ates in the art of teaching school music. The intelligent and hearty adoption of the normal idea by the Boston Training School of Music will be hailed with great interest by school men everywhere with the best wishes for success in this new departure.

A MAN who talks so much and with such a saving grace of wisdom and common sense on social, sanitary and economic questions as Mr. Edward Atkinson, must be excused for now and then being remarkably "knowing concerning things that are not so." A most conspicuous instance of this seems to us the statement in a recent address in New Hampshire, of his belief in the decline of manhood in New England. Mr. Atkinson, in the same address, thoroughly disposed of the persistent attempt of theoretical politicians and big-headed, local "boomers" to publish abroad the industrial "decline of New England." But if the present amazing prosperity of this little north-east corner of the Republic, so thoroughly demonstrated by Mr. Atkinson, is to be purchased at the expense of a declining manhood, there will be few thanks for his demonstration. But in this matter, even so wise a thinker as he seems to have fallen into the common delusion of estimating the manhood of a state by the number of its famous men. That the New England of today does not keep at home so large a proportion of her promising young men as half a century ago proves two things; — first, that her great educational facilities are sending forth so many brilliant youth that there is no room at home for a career, while the vast opportunities of the growing West are claiming them and rapidly furnishing desirable positions; — second, that the New England of today is so far in advance of the old time in the widespread intelligence, general capacity and skilled activity of its masses, that the ancient domination of a few exceptional men is no longer possible. Massachusetts has, today, a dozen public men of broader and more practical capacity for statesmanship than any great political leader of her past. The trend of thought, at present, in our country is not to literature or statesmanship, but to that complex theme, Social Science, including education, the readjustment of labor, practical religion and philanthropy, — the whole art of living under the new heaven, upon the new earth, which the highest modern civilization is now compelled to face. This preoccupation of the leading minds in the building of the new civilization has called to the front the coöperation of woman as never before. Never was there a period in the history of New England when anything like the amount and quality of mental, moral and industrial capacity and culture was at work at home, and never were the leading states of New England so influential upon modern civilization as today. The re-enforcement of

the "Native American" by the European immigration; especially the development of the church, from the old-time Puritanism into the largest variety and growing coöperation of denominational Christian activity, is a mighty added force in the New England society of the present. New England can dispense for awhile with the Websters, Everetts, Sumners, Emersons, Longfellows and Hawthornes of her past, if in the supremely preëminent interest of the readjustment of modern society she can retain the proud distinction won by her people in the past generation.

EVERY state in this Republic is doing so much, according to its ability, for Education, that it is no wonder its enthusiastic educators now and then fall into the delusion that the "old East" is going into an educational decline. The old fellow in south-western Ohio, who asked the Boston man; — if "he liked to live way down thar"; and the eminent ecclesiastic in Atlanta, who, in subdued tones of compassion, said to us: "I suppose your good old town of Boston has about done growing;" find their parallel in the rising educator out West, who periodically informs the Universe that New England is "at the tail of the educational procession." Now, New England, led by Massachusetts, has certainly done her part, through men, women, books and money, in the upbuilding of education beyond the Alleghanies. But she still retains enough of her Yankee instinct of "looking out for number one" to see to it that education suffers no harm in the home preserve. If our desponding friends will favor us with a visitation, at the school season, and actually give a month of solid work to the taking account of educational stock even in "declining" Massachusetts, they may once more take heart and hope. We wish our latest bereaved brother in Chicago could have been with us the past week, in a visit to Fall River, Mass.; — one of our new cities, with a heavy prèponderance of manufacturing population, perhaps more resembling in many respects the rising great towns in the West than our older and more cultivated cities. Here we found, perhaps, the most complete high school building in America; — involving a cost of nearly $1,000,000, the gift of one generous citizen, with Doctor Leighton as master of a school numbering nearly 500; a school system with 250 teachers, and an enthusiasm that even Chicago might envy. The local institute held by the state educational department called together a company of 500 teachers, instructed by our accomplished Secretary Dickinson and his corps of assistants, each an expert of national reputation. This work is going on all over the state, and with no desire to boom "the Commonwealth of Massachusetts," we remind our friends, everywhere, that the less stock they take in the educational decadence of "way down East," the fewer apologies will be in order by and by.

CORRESPONDENCE.

The editor of EDUCATION receives during the year many letters bearing on subjects suggested by articles in this magazine, and it has been his habit to make autographic replies to any inquiry sent in. Nearly all questions have required answers that would be of interest and value to the other readers of the magazine, and as the questions have increased, it has been deemed best to open a Department of Correspondence, which shall be an open arena for all the readers of EDUCATION. Questions germane to the subject of education are welcomed, and a discussion of these is invited. Address all communications for this department to the Editor Correspondence Department, care of EDUCATION.

WORKS OF HORACE MANN.

Editor of EDUCATION: — The review of the Life of Horace Mann in the September number of EDUCATION is a notable contribution to the literature of this great educator. It must be a matter of sincere regret to every teacher that the editor and publishers of the works of Horace Mann could not have abridged the work and brought it within purchasable limits. As it is issued in five volumes at $2.50 a volume, it is quite out of the reach of many, very many, who would be glad and profited by having a record of this pioneer of one's free public schools. The article in EDUCATION was a whet to our appetite, but the appetite could not be satisfied at the price demanded. My purpose in writing is to inquire if there will not be issued a one volume edition of the Life and Works of Horace Mann. Have the publishers any plan to this end? SENEX.

Boston.

[I agree with Senex in thinking that the five-volume edition is too large and costly for the average teacher to buy. It strikes me that much could have been excised from the volumes and the work brought into reasonable limits. It is not, however, necessary to purchase the entire set, as single volumes will be sold. I have no knowledge that the publishers intend to bring out an abridged edition.]

SCHOOLS IN FRANCE.

Editor of EDUCATION: — When I have felt the necessity of extolling any school system, I have invariably praised the Prussian and held it up as the model which all nations were to copy and strive to emu-

late. I fear I have a rival in my "Model system." Of late I have observed that educational periodicals have almost entirely held up the school system in France under the Republic's rule, as one most worthy of consideration and study. I have never thought that France had much to offer in this matter, and have been rather inclined to treat in a flippant manner her pretensions to recognition in the domain of pedagogy. If, however, I am behind the times, I desire to make haste and rectify my misconceptions and be set right. I wish some one would set forth in a brief manner the present status of education in Republican France, and state in what way there is there a decided improvement and advance over that in other European countries. Will you, Mr. Editor, give space for such an article? F. R. S.

Worcester.

[Certainly. If F. R. S. has been a diligent reader of EDUCATION he will have read within the past year several articles on the schools of France. Doubtless these articles have been the cause of the mental perturbation of F. R. S.]

ABOLITION OF SCHOOL FEES.

Editor of EDUCATION: — I am deeply interested in the law recently passed by the British Parliament whereby all school fees were abolished, making, I take it, all schools free, as they are in this country. I have seen only newspaper items of the bill, and these treated of the political aspect of the bill. Will you kindly direct me to a publication which will give me a full account of the operation of the law?

Washington. GAMMA.

[Under the department of Foreign Notes in the September number of Education a half page is given to a resumé of this bill and its provisions. I do not now recall any publication in America which has treated of the bill *in extenso*. I presume you could obtain a copy of the act by writing to the Director of the London School Board.]

FOREIGN NOTES.

GREAT BRITAIN.

Free Education Act, England. — The Free Education Act which bears date August 5th, and went into effect September 1st, affords a striking illustration of the way in which opposing policies meet and coalesce in English legislation. Free popular education has long been advocated by the Liberals and decried by the conservatives. Nevertheless it is a government under the leadership of the latter which

introduced and successfully carried the measure through Parliament. The Liberals have always contended for public control of schools receiving public funds, but they have contented themselves with simply protesting against the failure of this act to maintain that principle.

Heretofore voluntary (i. e. private schools, chiefly denominational), have derived about 46 per cent. of their support from the government grant, now they will derive about 78 per cent. from this source. They still, however, enjoy freedom from public control, excepting that they must meet the requirements of the education act as to buildings, teaching force and obligatory subjects of instruction, and must not violate the conscience clause which forbids religious instruction to be forced upon any child against the wishes of his parents. In attempting to estimate the value of this provision, it must be remembered that there are 10,000 parishes in England having nothing but church of England schools. Of six such schools in Lancashire having an attendance of seven hundred and fifty children, five hundred and eighty-four were, according to a recent return, the children of nonconformists. Moreover in all the parishes specified the vocation of elementary teacher is virtually closed against all persons not members of the established church. These are some of the incidental outcomes of a denominational system. The new act does not *make* the elementary schools free, it simply provides funds to make up, to all schools, board and voluntary whose managers abolish fees, the amount thereby sacrificed. The grant will be reckoned at 10 s. per unit of average attendance of all pupils between three and fifteen years of age. Schools in which the income from tuition fees for the last years did not reach a higher average than 10 s. per pupil, must remit all fees for children between the ages mentioned if they would have the benefits of the act. Schools whose income from fees exceeded this average may continue to charge fees sufficient to make up the difference. It is expected that all school boards will accept the act. They will, however, adopt different courses. The London Board has already declared all its day schools free. The Birmingham Board has abolished all fees in both day and evening schools, although the latter are not included in the act. The Sheffield and Bradford Boards abolish fees in all but the Central High schools. The Episcopal bishops generally advise the managers of church schools to accept the act. The Wesleyans protest against the policy of the act, but will probably make their schools free. Catholic teachers, who are the worst paid in the country, have appealed to parents to share with them the moneys saved by the remission of fees.

University extension 1890–91. — The report of the Oxford University extension lectures for the year ending July 31, 1891, shows greater

progress than for any previous year. "Since June, 1890, one hundred ninety-two courses have been delivered in one hundred and forty-six centres by thirty-three lecturers. The courses were attended by 20,248 persons, and the average period of study covered by each course was twelve and one-half weeks. Examinations were held at the end of one hundred and thirty-two courses; 1,388 candidates entered for the examinations; and 1,181 condidates received certificates, of which five hundred and eight were certificates of distinction."

As compared with 1885–86, this is an increase of one hundred and sixty-five in the number of courses delivered and one hundred and twenty-four in the number of lecture centres. The average attendance was not noted at the earlier date but since 1886–87, it has increased by 10,340, while the average duration of the period of study covered by each course, has risen in the same time from eight and one-half to twelve and one-half weeks. The distribution of courses by subjects during the year was as follows: on historical subjects, 90 courses; natural science, 64; literature and art, 33; political economy, 5. The supervisors regret a noticeable decrease in the last named branch; this is more than offset by the increase in the number of courses in natural science. The latter have been promoted by the county council grants (mentioned in EDUCATION heretofore) which are confined by law to the assistance of teaching on scientific and technical subjects.

"The supervisors note with pleasure that at several centres in the north of England, the courses of lectures are regularly attended by many hundreds of artisans. Several of these courses were, as in former years, paid out of the funds of societies of working men. The Union of Working Men's Coöperative Societies, has provided six small scholarships to enable the students who have been more successful in certain educational classes arranged by the Union, to attend the summer meeting of university extension students in Oxford.

"The prize essays submitted to the delegates in the competition for scholarships tenable at the summer meeting have again reached a high level of excellence, and the number of competitors has largely increased. The competition is limited to those who have attended Oxford University extension courses during the year, and the success of the efforts of the lecturers to interest men and women of all ranks of life in systematic study, is shown by the fact that among the competitors for the scholarships were cotton-weavers, brush-makers, printers, book-binders, mechanical engineers, and other artisans. The competition for the scholarships offered to elementary teachers also produced as in former years, a number of excellent essays."

The Cambridge syndicate for local lectures reports a satisfactory year.

The experiment of summer courses at the University for "Exten-

sion" students was tried a second time this year, the period of study lasting from July 28 to August 22. As an evidence of the thoroughness of the work done in extension courses, it is worthy of note that the University of Cambridge has admitted extension students who have followed a prescribed course of continuous study, as affiliated students and excused them from the "Little per cent." (*i. e.* previous examination which is equivalent to matriculation examination) and one year of residence.

Edinburgh Merchants' Company's Schools. — The school system of Scotland affords a remarkable example of the union of public and private agencies in the work of popular instruction. Among private agencies, directed to this interest in Edinburgh, the most important is, The Merchant Company. Since 1870, they have devoted to the maintenance of a system of schools, the income of the old Hospital Endowments under their charge. During the last session, the number of pupils in their schools reached a total of 6,362, the number of teachers, 280. The accumulated funds were £662,423 ($3,312,115); the amount of teachers' salaries paid, £31,000 ($155,000). The quality of the work done in these schools is indicated by the success which their students have gained in the many competitive examinations now maintained in connection with Scottish and English universities, and the Home and Indian Civil Service.

The higher class schools of the Merchant Company are four in number, the Merchant Maiden school, now called the Edinburgh Ladies' College, and George Watson's College for Ladies, and George Watson's College and Daniel Stewart's College for Boys.

It was in 1722 that the company was entrusted with the administration of Mr. George Watson, a merchant in Edinburgh, who left £12,000 for the maintenance and education of the sons of merchants in Edinburgh. The number of boys now in the school is over 1,200 arranged in elementary, junior and senior divisions, so that the school carries a child on from about five years of age to the portals of the university. The education given is of a liberal character, qualifying the boys for commercial or professional life. The school was enlarged a few years ago, and many modern improvements introduced into it. Recently it has taken a leading place in fitting out boys for the very highest positions in this country and in the Indian Civil Service. In a statement just issued, it appears that the money value of the scholarships, bursaries, medals, prizes, etc., gained by former pupils at the Edinburgh University and elsewhere for the year 1890–91, amounted to no less a sum than £5,006. The course of study includes English, Latin, Greek, French, and German, writing, arithmetic, book-keeping,

shorthand writing, algebra, mathematics, drawing, vocal music, natural and physical science, chemistry and drill. A spacious and fully equipped gymnasium has been recently added to the college, and all the pupils have an opportunity of receiving instruction in gymnastic exercises. There are three departments—an elementary, a junior and a senior—each of which is divided into classes. There is a classical and a modern or commercial side. The quarterly fees are from 12 s. 6d. to £2-2 s., but there are numerous bursaries which lighten the cost to those whose means are straitened, and for the clever pupils, there are many scholarships to open up the way to a university career. The George Watson's College for Ladies is just now rejoicing in the signal victory achieved by one of its pupils, Miss E. C. Higgins. This brilliant girl after taking all the prizes that came in her course, went to the Royal Holloway College (England), on a scholarship of £75 ($375) per annum for three years. Here she has achieved the triumph of passing the London matriculation examination as head of the Honor list. This is the second time in the history of London university that a girl has attained this position.

FRANCE.

History of the Communal Schools of Lyons.—The French educational system is one of the most remarkable movements of our day, and as such, peculiar interest attaches to everything that throws light upon its origin, operations, and tendencies. For this reason, more than passing notice should be given to a volume edited by Mr. J. Janicot, inspector of school works. It is a monograph of 400 pages treating of the communal schools of Lyons from 1828 to the present time. It traces their progress through all the vicissitudes of the restoration of the Bourbons, the second revolution, the Empire of Louis Napoleon, and the present Republic. It follows and analyses their operations under clerical control and as parts and parcels of a secular system. The number of these schools at the present time is 112, classified as follows: Elementary primary, for boys, 52; for girls, 54: superior primary, three for each.

Physical Culture.—The movements for the promotion of physical training gains force in France daily, and is continually manifesting itself in some new experiment. The most recent is a special course of swimming for pupils of the public schools of the thirteenth district of Paris. Mr. Subercaze, the inspector of primary schools for this district, has for a long time conducted about 2,000 children under his charge, once a month to a pool where they could enjoy the pleasure of bathing. He has at last induced the authorities to arrange at the same place for instruction in swimming. A. T. S.

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned. Articles of special importance to teachers will, as a rule, be mentioned in notes.

Press and Public men, The. *Century*, October. "During the past thirty years there have been four periods within which the relations between the press and the political population of Washington have been very different and distinctly marked. First, the war period, when the relations were friendly, when the press stood in the confidence of the government, securing support of the administration; secondly, the post-bellum period, up to the times of the Credit Mobilier and kindred scandals; next, the long period reaching on through continued friction between Congress and the press representatives, embracing the days of the premature publication of the Treaty of Washington down to recent years, the result of which contest was as if the presiding officer of the Senate had passed the venerable emblem of senatorial prerogative into the press gallery over his head; and lastly, the present, which may be designated the era of restoration of friendly relations."

Art Students' League of New York, The. John C. Van Dyke. *Harper's*, October. "It is about the method of art students, whose individuality is so important a factor in their work, that people disagree." "Of the 900 pupils, many are designers and engravers, who seek to improve their work by night study; many are teachers in schools, or carrying on decorative work; some are artists who have, perhaps, started wrong in the beginning; some are well-to-do girls who think it advisable to know some one thing in case they should some day become dependent on their own exertions for a livelihood." "If we ever have a native art, or an appreciation of any art, it must spring from such source as the Art Students' League. Culture must come from within; it cannot be imparted from without. Nor can native art be produced by a sudden burst of energy. It took 400 years to produce the art of Greece, and as many more to produce that of Italy."

Catholic Savants, The Congress of. Raoul Allier. *Andover Review*, Oct. Met in Paris in April, during time when students were in the city; 2,500 members, more than 600 took part, 149 memoirs read. "The church anxious to show that its dogma is not opposed to the science of the time; discussions not prominently apologetic. Six sections: (1) religious sciences, (2) philosophy, (3) law and political economy, (4) history, (5) mathematical, physical and natural sciences, (6) anthropology." "One might often wonder why this or that mathematical or physical question was treated in the congress; explanation in the desire of the church to bring all thought under its control."

Döllinger, Ignatius von. E. P. Evans. *Atlantic*, October. "Notwithstanding his unquestionable courage, he had not the high spirit of Luther, but the shrinking scholarly temperament of Melanchthon, and deemed it his mission to combat error with the weapons of the spirit drawn from the armory of science. To become personally the centre of any outward agitation was positively painful to him." "The older he grew, the more forcibly he felt how rare it is to find an intellect capable of doing justice to thinkers of the past; it is a power as rare as the possession of the historical sense, which no learning can supply."

Education in the United States, Free. Harriet S. Blatch. *Westminster*, October. "The free kindergarten and primary school founded in New York by the Society of Ethical Culture does not get as scholars the best type of the poor, because it is looked down upon as a charity, since it is free and yet not supported by the state." "I believe the better conduct of American children is due mainly to two causes: the education of boys and

girls together, and the wider influence which is accorded to women." "I have been told by teachers in Europe, that it is impossible to leave a class without a monitor, even for a moment."

Education, Metamorphosis, in. A. E. Dolbear. *Popular Science Monthly*, October. "Not only physical science, but especially history, philosophy, psychology, ethics — all have to be rewritten and all educational institutions founded upon these, as most all have been, have got to be metamorphosed to adapt them to the knowledge which has been acquired in this century and mostly within the last half of it."

Emperor, The new, and his new Chancellor. Charles Lowe. *National Review*, September. "The most capable and promising monarch who has mounted the throne of Prussia since Frederick the Great. Some of his marginal notes on official documents are truly striking in their force and clearness, and in respect of their indication of an ability to go straight to the root of a question through all encumbering side issues and obscurities. He is as full of information about things in general as he is eager to learn more." "The success of General von Caprivi, as Imperial Chancellor, has so far been as striking and complete as that of his sovereign. No one had ever suspected that under the guise of this simple soldier-sailor, there lurked the making of a great, or at least a very safe, statesman."

Federating the Empire: a Colonial Plan. Sir Charles Tupper. *Nineteenth Century*, October. The best part the colonies can render in contributing to the defence of the Empire is not by soldiers and ships of war, but by lines of travel on land and sea. "In its railroad across the continent, Canada has not only provided means of intercommunication, the means of carrying on our trade and business, but has also established a great imperial highway which England might tomorrow find almost essential for the maintenance of her power in the East. Yokohama is brought three weeks nearer to London than it is by the Suez Canal." Empire served best by the individual growth and prosperity of the colonies. Some protection will be needed under a federation; "the outlying parts must be treated by this country on a different footing from foreign countries."

Fittest or Luckiest: which survives? G. W. Bulman. *National Review*, Sept. This writer denies that Darwin and Wallace have proved that slight variations tend to be perpetuated; he would emphasize the "indiscriminate factor" in the struggle.

Games. Street games of boys in Brooklyn, N. Y. Stewart Culin. *Am. Folk-Lore*, September. Describes thirty-six games, most of them varieties of "tag" and "I spy"; an account of "gangs" of boys in Brooklyn and Philadelphia, and their "initiations."

Geographische Kongress, Der Internationale. Robert Sieger. *Ausland*, Sept. 7. Held at Berne, Aug. 10–16. Difficulty in making such a convention really international; Germans in attendance few, English still fewer. Attempt almost succeeded to adopt meridian of Behring strait in place of that of Greenwich; latter has been accepted by the official cartography of middle Europe and by international associations of all kinds. The objection to meridian of Greenwich was that the clouds prevent as frequent determinations as should be made on account of the variations in the axis of the earth. Much information in the large exhibit of apparatus. Most of the scientific papers were read in the sections of the congress, the general meetings being given to hearing famous travellers, who were of interest in themselves, rather than for what they said. Some of the subjects discussed were: The occupation of Africa by the Christian missionaries, the original home of the Caribs, a map of the world on the scale of 1: 1,000,000, the Nicaragua canal, the railroads of Java and Sumatra, a world-time which might be used beside the time of each place.

Geschichtsunterricht in aufsteigender Linie, Der. Herman Grimm. *Deutsche Rundschau*, Sept. Great difference in education since we were young; then awe of past of Greek and Roman times. A complete revolution may be expected, like introduction of a new weapon of war. Political changes, the German Empire, popular suffrage — all this calls for change in education. "No longer the chief aim to get the ideal views, which mitigated for us our political inactivity; but now activity must be developed." He plans a six years'

course in history: (1) union of geography and history of new German Empire. (2) the Kingdom of Prussia, (3) commencing at Luther and the Reformation, (4) Germany in the Middle Ages, (5) Rome, (6) Greece. "The entrance into antiquity is then no longer a concession to classical learning, but comes as a demand."

Municipal Misgovernment, One Remedy for. Pres. C. W. Eliot. *Forum*, October. "Failures of democratic government are generally in the matters of municipal administration which present many novelties and belong to the domain of applied science: such as the laying of taxes; the management of water supplies and drainage systems; the paving, lighting, and cleaning of highways; the control of companies which sell in city streets light, heat, power, transportation for persons, and communication by electricity; the care of the public health: the provision of proper means of public enjoyment, such as open squares, gardens, and parks. All these matters require for their comprehension and proper management a high degree of scientific training, and the continuous execution, through many years, of far-reaching plans. The conservatism of a democracy is intense, partly because the average voter is afraid of administrative novelties, and partly because inexperienced officials necessarily follow precedents." The remedy proposed is competent persons in permanent positions.

Museen, Die zweckmässige Einrichtung grosser. Karl Möbius. *Deutsche Rundschau*, Sept. Buildings used have generally been built for some other purpose and not adapted to the collections. The public does not want to see as much as students need; there should be an exhibition-room for the public, separate from the main collection and containing the most interesting of each department. For most visitors, explanations by the side of the objects better than the best printed catalogue. Lighting, distance of object from observer, color of background are all important. Ornament in cases and pedestals should be avoided as so much more demand on eye and nerve of observers. Arrangement so that observer sees objects in only one case at a time favors concentration of attention.

Museum, The Berlin Renaissance. Wm. Bode. *Fortnightly*, Oct. "In Germany interest in the public weal is so new, wealth and even leisure are so rare, that presents for public purposes are few and far between. Even the Berlin museums suffer from this lack of wealth and public interest. For a most important furtherance of our aims, we have to thank the late Emperor Frederick and his wife. Even our museums have experienced the effect of the unamiable attitude taken up by the German press towards most public affairs. The German artists, and especially those in Berlin, maintain a position towards our collection of ancient art which, if not hostile, is at any rate one of indifference. This is partly due to our German character. Unlike the practical English, we love to separate practice from theory. Thus it is that we have artists and art-theorists; we have artists who do not know and do not want to know anything of ancient art, while there are only too many archæologists and historians of art who have no artistic feeling or any interest in contemporary art.

Parochial school, The idea of a. Rev. John Murphy. *Cath. Quarterly Review*, July. "In some cases the parochial school is superior, in others inferior to the public school. The parochial school system as a whole is laboring under disadvantages of method. While claiming advantages of our Sisters over the lady teachers in the public schools, we are none the less persuaded that it would be far better if they should cease to teach boys after the age of twelve. By the decrees of the Third Plenary Council of Baltimore, as regards priests, it is ordained that a good part of their seminary training should be specially directed toward their future pastoral charge of a parochial school. Their studies in psychology, pedagogy, and pastoral theology are to be directed with a special view towards the education of youth."

Russia under Alexander III. Professor Geffcken. *New Review*, Sept. Most important persons under his government are Podobenoszew, Minister of Public Worship, and Count Tolstoi, Minister of Internal Affairs; the late outrages are due to these and Minister of Justice, Manassein. "It is not unlikely that such things can

go on without the knowledge of the Emperor. He is inclined to peace; afraid of being influenced, yet open to fanatics like his ministers. Notwithstanding his private virtues, he is far from being a happy man or successful ruler. Russia has certainly vast natural resources, but they cannot be turned to account for the benefit of the population under the present system of government, which rests on violent suppression of every free opinion, on official corruption, and a perverse fiscal policy."

Senses, The Rivalry of the higher. G. T. W. Patrick. *Pop. Sci. Monthly*, October. Eye-mindedness was triumphing over ear-mindedness. Multiplication of reading matter, visual illustration, and photography. Languages even studied almost entirely by books. Growing dependence on libraries. Arts of music, oratory, and conversation neglected; so of philosophical studies, in so far as they cannot be illustrated and have no apparatus. Bad results on memory. Theatre preferred to opera, and opera also becoming spectacular.

AMONG THE BOOKS.

PHILLIPS BROOKS, by Newell Dunbar, is a brief, glowing estimate of the great preacher and pulpit orator. The new Bishop of Massachusetts is now in the height of his great powers. On the thirteenth of December he will be fifty-six years of age. As a man, as a preacher, as an author, he commands the respect of all men. His rushing, burning words hold his audience in breathless attention. His strong, calm, wise, helpful writings rest, comfort and cheer multitudes of hearts. This little book is opportune. It sets the noble man before us in his earnest love for truth, his devotion to fellow-men, his rare simplicity and his majestic power. It is published by J. G. Cupples, 250 Boylston street, Boston.

SUCCESS AND ITS ACHIEVERS is the striking title of a massive volume by Rev. Wm. M. Thayer, the well-known author, and frequent writer for EDUCATION. As the author of the "White House Series," the "Log Cabin Series," "Tact, Push, and Principle," etc., Mr. Thayer needs no introduction to our readers nor to the reading public generally. In this great book of 641 large pages, he gives a vast quantity of most interesting matter to illustrate the way in which a multitude of noted men, and quite a number of celebrated women, reached eminence in the various walks of life. Here are facts of great stimulus and real worth for all aspiring youth, culled from the public or private life of our most eminent living and departed statesmen, merchants, lawyers, divines, physicians, editors, inventors, philanthropists, and reformers. In the long list are such men as President Harrison, Ex-presidents Grant, Garfield, Lincoln, and Washington; Blaine, Wanamaker, Seward, Beecher, C. C. Coffin, George Bancroft, Generals Sherman, Sheridan, Howard, Logan, and Butler; Franklin, Garrison, Phillips, Douglas, Mann; Vanderbilt, Depew, Gould, Carnegie, Lawrence, Gordon, Dodge; Longfellow, Whittier, O'Reilly; Childs, Stanford, Claflin, Pullman, Talbot; Moody and Brooks; J. Q. Adams, Ericsson, Burritt, Morse, Whitney, Watt, Horne, Eiffel, Pasteur, Stanley; also many distinguished foreigners; and here are such women as Mrs. Livermore, Mrs. Stowe, Mrs. Garfield, Miss Willard, Mary Lyon, and Laura Bridgman. There are scores of excellent photographs of these resolute successful leaders of thought and

action. This volume is interesting from beginning to end. That boy must be callous indeed who will not feel as he reads these inspiring records his own soul kindling with high and noble endeavor. It is a capital book to place in the hands of those just entering upon their life vocations. It is published in a first-class manner by the energetic young publishers, A. M. Thayer & Co., Boston.

One of the most important educational gatherings of the times was held in Boston, April 8–11, 1891, at the English High school building. It was styled a Conference on Manual Training, and was under the auspices of the New England Conference of Educational Workers, an association not yet a year old, but full of vigor and enterprise. The president of the association is Gen. Francis A. Walker, and his associates are leaders in all educational movements. New England has been the slowest of all the sections of the country to make a trial of manual training. Conservatism has had here a stronghold on the minds of the directors of educational affairs, and while there have been in some cities of New England attempts made to establish the system, there has been no concerted movement and no widespread conviction that the schools needed this addition to make them superior to their present condition. The time was ripe, however, for a discussion of opinions and theories, and for an exhibition of what has been done in manual training in the cities, not only in New England, but in the West and South. The Conference, and the Exhibition was an unquestioned success. Although tardily advertised and somewhat crudely arranged, it more than met the expectations of its managers. The report of this Conference is now in print, and contains a full record of all the meetings, a complete report of every paper read, and an exhaustive description of all the exhibits. It gives to the literature on manual training one of the most valuable contributions it has yet received, and it will be read by all teachers with interest and profit. Among the valuable papers given in the report may be mentioned those read by Profs. Patten, Rankle, Richards, Belfield, Chaplin, Kilbon, Bailey, James, Colonel Larned of West Point, Dr. Felix Adler, Col. T. W. Higginson, Dr. Enebuske, and others. In these papers are found the latest theories on the subject of manual training and the most cogent reasons for its introduction into the public schools. The report can be obtained of Mr. John A. Norris, Melrose, Mass., and the price is fifty cents.

Mrs. Lucy H. Washington has issued through her publishers, C. W. Moulton, Buffalo, N. Y., a modest volume of verses, under the title of MEMORY'S CASKET. Mrs. Washington rhymes easily, and her verses are graceful and oftentimes pathetic. She is a devout temperance advocate, and not a few of her poems are on the work done by the W. C. T. U. Some of these poems as well as her Sunday-school songs have been set to music and are to be found in song collections.

Those books which grow out of our own need are very likely to satisfy a similar want on the part of some other. Such a book is "COMPARATIVE VIEW OF GOVERNMENT," by John Wenzel of the Boston University. It describes in concise terms the executive and legislative departments in the United States, France, England, and Germany, the whole being arranged in parallel columns. This little volume will be found most serviceable to all teachers of Civil Government. Published by D. C. Heath & Co., Boston.

HOW TO MAGNETIZE, by James Victor Wilson, is a republication of his work first issued in 1847. It is based entirely on the theory of animal magnetism, and gives specific directions for selection of proper subjects, the exact method of inducing the desired sleep, and the best means of arousing the power of clairvoyance. But this whole theory is now exploded, it having been replaced by the theory of suggestion. The latter has for its supporters the most eminent psychologists of the present day, and is based upon experiments scientifically carried out at Salpétrière and elsewhere, under the name of Hypnotism. Such is the great power that one person may exert over another, that its possession is very dangerous and one which it is not best to have generally cultivated. The agent loses control over his will and cannot be held responsible for his actions. As a therapeutic means, its power is not to be denied, its ability to do good is unmeasured, but it should be carefully distinguished from clairvoyance. Fowler & Wells, Publishers, New York.

What little mines of gold these books of quotations are! It is a real pleasure to take up the daintily bound volume, entitled WISDOM OF THE WISE, by Caroline L. Hunt. It represents the gleanings of years from all sources, ancient and modern, arranged according to subject. Here we may find many an old friend; Holmes, Richter, Emerson, Epictetus, Horace, as well as many a stranger. Such a book opened at random will afford in a few glances, food for thought for the entire day. Published by the D. Lothrop Company.

There are few as gifted writers in this country as Edward Everett Hale. And of his many contributions to literature perhaps no other has received or deserved so warm a welcome as his MAN WITHOUT A COUNTRY. Who having read this book does not drop a tear over the sad fate of Philip Nolan, or turn with a deeper devotion to his country. This little book deserves a place in every home and every heart in America. A beautiful flag edition has recently been published by J. Stillman Smith & Co., 3 Hamilton Place, Boston.

We have just been reading with unflagging interest an historical novel, entitled LUTHER IN ROME. It is an English translation, and much more, of the work of the German Schücking. The present author, Mrs. Eudora L. South has skillfully portrayed the Rome of nearly four centuries ago, weaving a bright and beautiful web of historical facts, religious and artistic feelings, all intertwined with chords of love. Some of the scenes are quite improbable, but love laughs at such things, and so do we, as, thrilled by the joys and sufferings and soul experiences of Irmgard, Corradina, Egino, Luther, Raphael or Pope Julius II., we hasten on from scene to scene. It is a hard book to lay down when once its spell is upon you. For Mrs. South, who is a teacher, knows how to instruct as well as interest. The book is brought out in elegant shape by the publishers, A. M. Thayer & Co., Boston.

John Trowbridge, Professor of Physics in Harvard University, has prepared an interesting book for young folks, called the ELECTRICAL BOY; or the Career of Greatmen and Greatthings. It is the story of a poor little street Arab who kept his eyes open, found friends, and ultimately won position and wealth. Many of the situations are highly exciting and more or less improbable. Electricity is the Aladdin's lamp with which he works wonders. The publishers are Roberts Bros., Boston.

EVERY-DAY ETIQUETTE is a helpful little book on good manners, by Louise Fiske Bryson. It is full of good and wise suggestions as to one's minor morals, as to eating, drinking, and one's manners and actions in public or in private. If the children of the land could be induced to carefully study this little manual, we should look for a decided improvement in their manners. We are not in danger of overdoing in this direction at the present time. The publishers are W. D. Kerr & Co., of New York.

Seth T. Stewart's PLANE AND SOLID GEOMETRY marks an advance in works of this kind and sets a standard of excellence which it will be difficult for subsequent book-makers to surpass. Mr. Stewart has plainly entered into sympathy with the real difficulties which the average boy meets when he takes up the study of geometry, and he aims to remove these obstacles to a clear comprehension of the subject at the very beginning. Not infrequently do students say that they never understood geometry until they had studied the text-book half through. It will be impossible for a student to say this if he uses Stewart's book. Every step taken in unfolding the subject is so carefully taken, every point is so clearly explained, so much is thrown upon the student to develop his reasoning power and his self-activities, that the way is plain all the time and the progress along it delightful and inviting. The book abounds in delightful suggestions and material aids to the learner, and many valuable and novel devices are given. The teacher's labors will be greatly lessened by using this book, and the pupil's progress in the study as greatly advanced. Published by American Book Company, New York.

PERIODICALS.

Three cash prizes of $150, $100, and $50, respectively, have been offered by *Public Opinion*, the eclectic weekly of Washington and New York, for the best three essays of not more than 3,000 words on the question: "What, if any, changes in existing plans are necessary to secure an equitable distribution of the burden of taxation for the support of National, State, and Municipal Governments?" These prize essay contests on current questions, as conducted by *Public Opinion*, have attracted general attention. The present contest closes December 10. —— Rudyard Kipling's new novel, written in collaboration with Wolcott Balestier for *The Century*, is entitled "The Naulahka, a Tale of West and East." It is a story of America and India. The principal characters live in a "booming" Colorado town, where the story opens, but the scene quickly shifts to the court of an Indian maharajah, whither the hero and the heroine journey to meet with most varied experiences. The story will begin in the November *Century*. —— In *The Forum* for November, Edward A. Freeman, the English historian, the highest living authority perhaps on the subject, explains the political situation in Europe, pointing out the specific dangers to peace. There are also articles on "The Degradation of Pennsylvania Politics," by Mr. Herbert Welsh, of Philadelphia; "The Regulation of the Lobby in Massachusetts," by Josiah Quincy, setting forth the operations of the law to restrain the lobby; "The Danger of the Farmers' Alliance," by Senator John T. Morgan, of Alabama; and the "Death of Polygamy in Utah," by Chief-Justice Zane, of Salt Lake City. And Miss Anne J. Clough, Principal of Newnham College for Women, Cambridge, England, explains university work done by women in England. —— E. L. Kellogg & Co. of New York, have changed the form of the *School Journal*, making it a twenty-four page paper, which, with its new type and excellent printing, gives it a very attractive appearance. They have also begun the issue of a monthly *primary* issue of the *Journal*. These enterprising publishers deserve the liberal patronage of the teachers of America.

EDUCATION

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VOCATION VERSUS CULTURE; OR THE TWO ASPECTS OF EDUCATION.

BY HON. WILLIAM T. HARRIS, LL. D., COMMISSIONER OF EDUCATION, U. S., WASHINGTON, D. C.

THE teacher is by vocation one of the most conservative of men. In this respect, he is surpassed only by the clergyman and the lawyer. He is one of the three persons appointed by society to preserve its institutions. It is necessary for the social whole to store up the fruits of its experiments and save what it has learned regarding the best manner of living. This experience is embodied in laws, civil and criminal, which give proper forms of doing important things and define what is not to be done. The lawyers have the guardianship of this priceless heritage of the past, and it is their vocation to settle the application of those forms to practical life.

But the frame-work of laws and the constitution of government are not the only precious things which society wishes to preserve. There are more fundamental things even than these. The insight attained by the wisest men — by the prophets and seers of the human race — into the nature of the Great Power that is creating and governing the world — this insight furnishes the deeper basis of the conduct of life, and, in order that no part of the revelation of the sacred doctrine may be lost or forgotton, society trains up and consecrates a special class of men to this service of guarding the purity of the oracles of religion and imparting them to men.

wyers are conservative, because their whole business is to
e affairs of every-day life square with the forms prescribed
statute book.

the clergy are still more conservative, because they have to
with fundamental convictions of the race, or, people which
ot belong to the class of matters of opinion or individual
s, but are rather matters of supreme authority. The work of
gious teachers is chiefly that of educating the people into an
ding respect for the authority of these oracles. For religion is
thing without faith in authority. Hence the clergy are the
ost conservative portion of society, and woe betide society were
his otherwise.

But the school teacher comes next, I think, in the order of the
conservative ranks in the community. It is remarked that women
are more conservative than men. We should expect this, because
the characteristic vocation of woman in the family is the rearing
or nurture of children. The child begins life a savage, ignorant of
civilization. He must be taught everything: how to take care
of his person, how to behave in the presence of others, how to do
his work in the world and earn an honest living, how to observe,
and how to think. He has to learn the view of the world which
the civilization has attained. The woman as mother has this work
of rearing the child into an observance of these forms of civilized
habit. These forms of habit are not written out in statute books
and interpreted by a caste of lawyers. They are so subtle that it
would be difficult to write them out. They consist of a mass of
punctilios and ceremonies, formalities and usages, which consis
partly in action and partly in refraining from action. The actio
of the will in refraining from action is called by the techni
term of inhibition. The good mother is always on the aler
see to it that her child learns to inhibit — learns self-contro
self-restraint. Out of one thousand things he may do,
hundred and ninety and nine are improper to be done, a
must refuse to adopt them. Passing by all these, he must d
the one thing proper.

The child who followed every impulse of nature just as
mal does without inhibiting could not live in civilized socie
do this, he must inhibit more than nine tenths of his cap
impulses and force himself into the forms of behavior
settled by society. Some of these forms and

mere fashions that do not concern objective well-being. Others, however, are habits which concern health or prosperity or peace with one's neighbors and cannot be neglected with impunity.

No wonder that woman becomes conservative when she has, as mother of the family, all the work of training children into the observance of so many forms and usages! Her chief work is inhibiting this or that and educating the child into the practice of inhibiting constantly. He must repress his animal nature and form in its place a spiritual nature.

The vocation of the mother in rearing the child is taken up and continued by the school teacher. The child has already acquired — thanks to his family education — his bundle of personal habits and the use of language to communicate ideas and to receive them.

But the teacher has many new provinces of habit and knowledge into which to lead the pupil. These belong on the one hand to behavior and concern the education of the will, and on the other they concern the intellect and relate to perception, reflection, thought, and insight.

The special work of the school in the great process of education is that of giving to the youth letters and civil manners. The active process of education includes, as is evident, not only the school, but the family nurture and the church, also the state and civil society.

The school in teaching civil manners differs in its functions from the family. Behavior in the family is based on a form of socialism — each one shares in the property of the whole, and there is no hard and fixed line of division drawn within the family, such as separates one family from another. Hence, family education does not suffice to develop the individuality of the pupil beyond its most elementary stage. The school has to develop the secondary stage of individuality, that wherein the youth acquires a deeper independence. The school pupil must learn how to behave towards independent equals and towards those established in authority over him, not by nature like his father and mother, but by civil ordinances appointed his teachers. Omitting for a moment the other phase of school education, that of intellectual training, let me ask you to consider more in detail this education of the pupil's will in the matter of behavior. This is not theoretical instruction, but essentially practical — the training of the

youth in doing. To be sure, the good teacher mixes with his discipline a gradual training into the reasons for it. He shows why the pupil must be observant of the rules of the school — namely, for the efficiency of the school itself. But the instruction in the theory of good behavior is not so important as the practical training itself. It is more important that the youth shall form habits of punctuality, regularity, silence, and industry, than it is that he shall see the use of these habits.

The school, as I conceive, is in this respect the most signal means that exists for the training in citizenship.

In recent years, we have seen educators give especial attention to this function of education, and a large association has been formed with a view to promote instruction in civics. I do not think that it has been thoroughly considered how exactly the well-disciplined school furnishes just the training that is needed in civics.

Coming from the family, the child is fully nurtured in the clan feeling; he now must be educated out of the clan feeling into civil obedience. The form of school discipline furnishes this kind of education. The youth finds prescribed tasks and is required to form habits of working in concert with others. He must practise rigidly the semi-mechanical virtues of regularity, punctuality, silence, and industry in obedience to the constituted authority of the teacher. We must not fail to notice that those semi-mechanical virtues are just what is required to adapt the man to combine with his fellow man. He must restrain himself out of respect for the rights of others. He must be persistent, regular, and punctual, or his work will interfere with that of others. He must be industrious. There is no community where so much respect is taught for equals and superiors as in the school. Civil behavior is not the behavior that is demanded within the family — that is too much one of mutual confidence and interdependence. The form of school order is of a more advanced quality, because it presupposes independent interests combined with a common interest.

The child who behaves well at school, therefore, practises such conduct as enables him to coöperate with others in the community and respect others' rights, while he supports a common authority. The school pupil simply gets used to established order and expects it and obeys it as a habit. He will maintain it by a sort of instinct

in after life, whether he has ever learned the theory of it or not. But the good school inculcates gradually the principles of its rationality in the mind of the pupils. They gradually come to see that rules of order are based on deep underlying reasons, and are not the arbitrary will of the teacher, but the necessity of the school itself as a social institution. If youth are to be collected into an institution, the school, in order to be taught, it is necessary that they should observe such rules and regulations as make possible the instruction of the same in classes and by teachers.

Having taken this glance at the purely practical work of the school as training in civics or citizenship, let us consider in fuller detail the work for it in the training of the intellect. We have said that the school has for its specific work the preparation of the pupil for independent citizenship by civic habits and letters. Letters include the intellectual side of his training. The printed page is an instrumentality of inter-communication. It enables the individual to enter into the fruits of all human life — the observations of men past and present, their thoughts and reflections on things and events of the world, and their actions and successes or failures. The participation in all this is given with the training in letters; reading, writing, arithmetic, geography, history, grammar are the first studies of the school and they form the vestibule or fore-court that leads to that intellectual participation of each man with all men which constitutes civilization.

I have called the school teacher one of the most conservative members of society. It has become evident ere this why he deserves this epithet. He has to pull against the tendency of his pupils to capricious and arbitrary behavior. He must impose on them the form of reason in the place of their wild naturalness. The teacher insists on the adoption of the prescribed forms, and this is the essence of conservatism.

The teacher is conservative not merely in matters of will-training — matters of habit and action — but he is conservative also in the intellectual part of his instruction. He teaches the five cardinal branches as if they contained the wisdom of the race handed down to the rising generation. In fact, there is substantial truth in this assumption. Even in these times of rapid progress, the new acquisitions to the world's reservoir of human learning are not enough to cause any material change in the school compends of one generation to fit them for the children of the next. The

aggregate of old knowledge bears so great a disproportion to the new that the work of the teacher goes, nearly all of it, for the guidance of the pupil in mastering what is traditional.

But here is the place for an important distinction. While the family education lays chief stress on the implicit obedience of the child and does not trust much to the child's ability to comprehend reasons, the school on the other hand is bound to kindle as much of self-activity as possible.

In receiving his heritage of the wisdom of the race, the youth should verify it in his own experience and to some extent, by the method of investigation, conduct experiments of his own. The school should, in short, make the pupil's knowledge live knowledge.

Here makes its appearance one of the two great paradoxes in education. While education is conservative and makes it its chief business to initiate the child into what has already been learned and done before his time, it at the same time insists that he shall receive this learning actively and digest this knowledge by his own thinking and observation. It is quite natural that schools will differ in this respect, and, while some will lay most stress on the acquisition, others will lay most stress on the assimilation. The one class of schools will lay more stress on the memory, and the other will lay more stress on original investigation.

There will be in this matter, also, differences of nations one with another, extending from top to bottom through the entire educational structure.

Each nation has traditions of its own, and we in this country, and for the most part I believe that other Anglo-Saxon countries are with us, find ourselves in a deep contrast to the German school system. We, as a people, lay more stress on prescription — we require that the pupil shall conform himself to the prescribed rules of behavior and the matter to be learned. We have more faith in the memory and are, as a people, somewhat sceptical in regard to the value of the pupil's original work. We think it is better for him to use most of his time in learning the stores that have been accumulated. Hence it comes, that the reform in education, led forward in Germany by Pestalozzi and Froebel and carried out into practice by the pedagogues of those nations, is a perpetual challenge to the educational methods of English-speaking nations, and perhaps I may include, too, all other European

nations. The Romanic and the Anglo-Saxon peoples have always laid more stress on memory work with children than their German contemporaries. They have filled the memory of the child with prescribed conventionalities of intelligence, and have required strict obedience to external authority in the matter of behavior.

The German theory of education seems to take for granted, without the slightest question, the docility of the pupil. The German child belongs to a knowledge-loving race. Hence the German theory of education makes prominent the self-activity of the child as the one object of education. It repudiates foreign constraint either in conduct or in intellect. It condemns memorizing as a process of enslaving the intellect to dead items of information or opinion. It condemns the strict discipline of the schools as producing mechanical habits of obedience to the will of others. To awake the pupil's mind intellectually is theoretically the chief aim; critical alertness, and individual power to test and verify the statements of others, as well as to undertake works of original investigation — these are the supreme objects of German pedagogy.

Students of ethnology are aware, however, that nations differ in respect to their bent of mind and their natural aptitudes. The pedagogy of peoples is wont to be based on some insight into these aptitudes and the consequent necessity of inhibiting excesses. The Germanic nations are knowledge-loving, but the Anglo-Saxon nationalities love adventure and the exercise of the will power far more than they love science. The precocious English or American child exhibits an amount of restlessness and caprice which compels his teacher to direct a large amount of nervous energy from the work of pure instruction to the work that is called discipline, or government of the school. The child with precocious directive powers, and correspondingly small love of knowledge for its own sake, is very difficult to manage in the school room.

This gives us the clue to that tendency in our pedagogy and to that in all English-speaking countries, to allow intellectual instruction to degenerate into exercise of the memory alone. Memorized work may be tested with the least possible trouble — it does not distract the attention of the teacher from the work of keeping order and discipline in his school.

But ever since I began to attend educational meetings, I have heard this memory work condemned and the work of the thinking powers and original observation commended. I do not know how much longer it has been the fashion in teachers' assemblies to attack the one-sidedness of our practice. But, on reading Locke and Milton, one may conclude that it has always been the staple subject of educational discussion.

One is tempted to ask the question how much our methods have been modified.

The growth of cities has increased the proportion of graded schools, and classification has increased the length of time devoted to the conduct of a lesson. This alone of itself has led to a greater degree of thoroughness. The lesson has been analyzed more critically, the pupil has been called upon to explain in his own words the thought of the text-book, and finally he has undertaken laboratory work and the comparison of authors. The rapid increase of cities, then, has brought about a reform of our methods in the direction of the German ideal. But we still lay more stress on discipline in our schools than we do upon intellectual instruction, and we doubtless shall continue to do so while the character of our people remains action-loving rather than knowledge-loving. Our inhibitory work we see must lie along the lines of caprice and adventure. The German must look out for a defect in a different quarter. He must make his knowledge-loving children as active as possible and stir them up to adventure and original effort, at least in the realm of the intellect. We, Americans, defend our great tendency to prescription by calling it moral education and asserting that it is far more important than intellectual education.

We have already seen how easy it is to defend it, in our discussion of civic instruction as furnished by the well-disciplined school.

The second great paradox in school education is the counter-impulse of the course of study to drift towards preparation for one's industrial vocation on the one hand, or on the other hand towards ideal standards of culture removed from the wants of daily life. It is the conflict between the bread and butter and the culture studies. This second paradox is quite as much a perennial subject of educational discussion as is that first one of prescription *versus* spontaneity, or self-activity *versus* conformity to imposed patterns.

The so called "practical" education claims to give the child what he will most need in life, while the education for culture claims that its intellectual discipline gives such a solid basis of character and such versatile powers of thought that it will in the end prove far more practical than the narrow and concrete curriculum which is supposed to fit the pupil for business.

It does not appear that nations divide on this question into two opposite tendencies. Rather it seems that, in each national system of education, both tendencies are active and in a state of unreconciled tension against each other.

Inasmuch as the school ought to have both these tendencies and have them properly balanced, there is a legitimate effort on the part of each to find a more suitable form in which it may offer its curriculum to the school. New devices are invented from time to time and commended for adoption.

But it often happens that a really good device in education gets recommended at first on wrong grounds. For example, the kindergarten was advocated on the ground that it utilized the children's play for serious ends. But that seemed to wise educators to ignore the true use of play itself, which is of great service in developing a sense of personality in the child. By perfect freedom in acting out his own caprices in play, the child comes to know himself — play is a sort of self-revelation.

But to turn play into work is to destroy this feature of it. So to turn work into play on the other hand is a serious mistake, for it prevents the development of the secondary and deeper personality which feels satisfaction in subordinating itself for rational purposes. For, in work, the man gives up his own likes and dislikes, his whims so to speak, and conforms to the requirements of some external necessity. He gives up his subjective preferences and adopts what is objectively necessary. This is what we call "rational."

This first ground of the advocates of the kindergarten was therefore a bar in the way of the progress of its adoption as a link or member of the school system.

But when it came to be discovered that the true kindergarten does not turn play into work, nor work into play, but that it furnishes a very ingenious graded course of school exercises which develop in the child an interest in doing serious tasks, while it at the same time preserves and protects in the gentlest manner the

delicate individuality of the young pupil, then the kindergarten began to commend itself to all wise educators as a sort of transition from the education of the family to the more severe and exacting education of the school as it is and has been.

So, too, in the case of manual training which has been pleading for a place in common school education. It was at first defended on the preposterous ground that it is educative in the same sense that arithmetic, geography, grammar, and natural science are educative. This caused the new claimant to be distrusted by all teachers who had investigated what is called the educational value of the several branches of study. For it was known that each branch has its specific function and that no one branch can take the place of another. Arithmetic and other mathematical studies open the window of the soul that looks out on the physical universe and shows the necessary laws of matter and motion. On the other hand, grammar opens a window of the soul that shows the operations of the mind itself. For the mind has revealed itself in language and shown its logical nature in the structure of the sentence and in the functions of the parts of speech.

Geography, on the other hand, shows the social structure of the world of humanity. It shows the interdependence of one individual on another, and of one community on another. Through division of labor and through distribution of peoples in all parts of the world, the fruits and productions of all climes and conditions are made use of. Commerce is a great world process that collects all these articles of food, clothing, shelter, luxury, amusement, and culture, and distributes them again to each section and to each individual, so that all share in the labor of each, and each in that of all. Thus geography opens a window of the soul that reveals to the pupil this great industrial process going on at every moment in all parts of the world, and he learns to see himself as related to this process and thereby gains a rational self consciousness. For a rational self-consciousness is the perception of the larger self of the race: the social whole acting to reinforce the individual and assist him in his efforts to conquer nature and gain a supply of food, clothing, and shelter without sacrificing his higher spiritual manhood in mere drudgery.

History shows us the higher selves of man organized into the form of institutions, the family, civil society, the state, the church, each realizing man's higher rational self in such a manner as to

reinforce the puny individual. It thus opens a window of the soul which affords a vast survey of human nature. Literature exhibits the process by which feelings arise in the soul and become distinct ideas, and afterwards pass over into convictions, and then become actions.

The insight into the educational value of these general school studies caused the plea for manual training to be slighted at first, because of the evident absurdity of its claim to an educational value of the same kind as studies that open the windows of the soul.

But then it came to be considered later that modern civilization rests on productive industry, and that productive industry uses labor-saving machinery as its chief instrument to emancipate human beings from drudgery; that it takes the hand-worker and turns him into a brain-worker — for the machine does the hand work but it requires a brain to direct it. Hence productive industry needs more and more directive power, and less and less mere sleight of hand. Machinery increases the productive power of labor a hundred fold, and certainly the youth of the rising generation needs some general training in school which enables him to understand both the construction and the management of machines.

Now the manual training school has hit upon just the course of study and practice that will teach the pupil the construction of machines out of wood and iron. Manual training will therefore have its justification as a part of the common school curriculum.

The youth will, thus educated, find himself at home in a civilization which is more and more accumulating inventions of all sorts and descriptions to perform the work necessary to supply our people with food, clothing, and shelter at so cheap a rate as to leave a large surplus of income to purchase means of luxury, amusement, and culture. Gladstone has estimated that, in 1870, eight millions of laborers in Great Britain performed with the aid of machinery as much work as the total laboring population of the globe could perform without the aid of machinery.

The studies and disciplines of the school open the windows of the intellect upon all points of the horizon of existence, and they train the will to labor at what is most difficult because most unusual for the animal nature. The lower organized human being can work with his hands with pleasure, while it is still a task

of great difficulty for him to contemplate ideas or undertake any sustained train of thought. If youth can be taught to bring their powers to bear on such subjects as arithmetic, grammar, history, and literature, they certainly can with ease give their mind to any form of manual training or the work of external observation, because the greater includes the less, and the studies of pure science are far more difficult to carry on than studies in applied science.

The first step above the brute instinct begins when man looks beyond things as he sees them existing before him and commences to consider their possibilities; he begins to add to his external seeing an internal seeing; the world begins to assume a new aspect; each object appears to be of larger scope than its present existence, for there is a sphere of possibility environing it, a sphere which the sharpest animal eyes of lynx or eagle cannot see, but which man, endowed with this new faculty of inward sight, perceives at once. To this insight into possibilities, there loom up uses and adaptations, transformations and combinations in a long series stretching into the infinite behind each finite real thing. The bodily eyes see the real objects, but cannot see the infinite trails; for they are invisible except to the inward eyes of the mind.

What we call directive power on the part of man, his combining and organizing power, all rests on this power to see beyond the real things before the senses to the ideal possibilities invisible to the brute. The more clearly man sees these ideals, the more perfectly he can construct for himself another set of conditions than those in which he finds himself.

Men as tool workers, as managers of machines, participate in this higher kind of perception in different degrees, but all have it to some extent. The lowest human laborer has the dimmest notions of these ideals; they are furnished him by others; he is told what to do; he furnishes the hands to work with, and some one else furnishes the brains or most of the brain work. Unless a directing mind is near by to help at every moment with the details of some ideal, the rude laborer ceases his work, having no knowledge of what is required next. His capacity to grasp an ideal is small; he can only take it in tiny fragments — small patterns dealt out to him as a hand by the directing brain of the overseer or "boss."

It seems a waste of power to have two brains to govern one pair of hands. It is evidently desirable to have each laborer developed in his brain, so as to be able to see ideals as well as to realize them by his hands.

There are different degrees of educated capacity, due to the degree in which this power of seeing invisible potentialities or ideals is developed, The lowest humanity needs constant direction and works only under the eye of an overseer; it can work with advantage only at simple processes; by repetition it acquires skill at a simple manipulation. The incessant repetition of one muscular act deadens into habit, and less and less brain work goes to its performance. When a process is reduced to simple steps, however, it is easy to invent some sort of machine that can perform it as well or better than the human drudge. Accordingly, division of labor gives occasion to labor-saving machinery. The human drudge cannot compete with the machine and is thrown out of employment and goes to the almshouse or perhaps starves. If he could only be educated and learn to see ideals, he could have a place as a manager of the machine. The machine requires an alert intellect to direct and control it, but a mere "hand" cannot serve its purpose. The higher development of man produced by science, therefore, acts as a goad to spur on the lower orders of humanity to become educated intellectually. Moreover, the education in science enables the laborer to easily acquire an insight into the construction and management of machines. This makes it possible for him to change his vocation readily. There is a greater and greater resemblance of each process of human labor to every other, now that an age of machinery has arrived. The differences of manipulation are grown less, because the machine is assuming the hand work and leaving only the brain work for the laborer. Hence there opens before labor a great prospect of freedom in the future. Each person can choose a new vocation and succeed in it without long and tedious apprenticeship, provided that he is educated in general science.

If he understands only the theory of one machine, he may direct or manage any form of it. He could not so easily learn an entirely different machine, unless he had learned the entire theory of machinery. The wider his knowledge and the more general its character, the larger the sphere of his freedom and power. If he knows the scientific theory of nature's forces, he comprehends

readily not only the machine, but also all of nature's phenomena as manifestations of those forces. Knowledge is educative in proportion to its enlightening power or its general applicability. The knowledge of an art is educative, because it gives one command in a sphere of activity; it explains effects and enables the artizan to be both brain and hand to some extent. A science lifts him to a much higher plane educatively, because he can see a wide margin of possibilities or ideals outside of the processes in use and outside of the tools and machines employed.

There remains a permanently valid place for the manual training school, side by side with apprentice schools for all youths who are old enough to enter a trade and who are unwilling to carry on any further their pure culture studies. Cultivate the humanities first and afterwards the industrial faculties. In our civilization, there ascend, out of the abyss of the future, problems of anarchy on the one hand and of socialism on the other; individualism carried to such extremes that all subordination to peaceable and established law is deemed a fetter to freedom. This centrifugal tendency to anarchy is paralleled by a centripetal tendency that wishes, not only to have the central government perform all the duties of establishing justice and securing the public peace, but also to have it own all the property and manage all the industries. In short, the "nationalists" propose abolishing the sphere of competition and individual enterprise. Education in the history of the world, and in the literature that reveals the aspirations of the human heart, is well calculated to prepare the youth for a rational verdict on the extreme issues that will continually arise among a free people. Above all, we must never yield to the economic spirit that proposes to curtail the humanizing studies in our schools, for the sake of adding special training for industries. Rather must we do what we can to extend the period of study in pure science and the humanities, knowing as we do that all, which goes to develop the ability of the youth to see possibilities and ideals, goes to make him a more productive laborer in the fields of industry.

LAWS OF HUMAN GROWTH.

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BY "Law," we mean that which marks a uniform mode of procedure in harmony with a clearly defined plan, or purpose.

By "Human Growth," we mean increase of power in the direction of intelligent and beneficent uses and ends. This applies as well to the body as the soul.

The plan or purpose of a human being is clearly set forth in the nature of his faculties, as determined by their wonted actions, and in the kind or character of employment for which they are evidently intended. This latter is determined, or revealed by such activities as result in the greatest native strength of faculties as well as by the products or results arising from their improved conditions; viz., the acquisition of knowledge, experience and wealth, and their consequent enlarged capacities and greater enjoyment.

The increase of power is, therefore, the result of intelligent and beneficent uses, and is in direct ratio to the just application of knowledge to the redress of the rational wants of man. Man's wants, intelligently gratified, give not only the largest and most exalted scope to the exercise of his faculties but their fullest and most harmonious development, together with the farthest reach of science and scientific discovery. Man's legitimate wants rationally gratified exalt him to the highest possible point of improvement. This in itself involves an accepted law set for our observance in the education of the young.

Nature, in her diversified forms and phenomena, presents us the true type of human growth. In the growth of a plant, for instance, there must first exist a *germ*, or that which contains the living principle — the life force — so to speak. Second, there must exist elements friendly to the intended germination and growth. But the mere existence of these germs, and of these elements friendly to growth, can never *pro*duce or *in*duce

, if kept separate and apart. Kernels of wheat, for ce, have been preserved ungerminated and undecayed, for ands of years in situations unfavorable for growth, or for y, as in some of the tombs of Egypt and Assyria, no change ng been wrought upon that mysterious something — the m — included in them, and which preserved them thus intact.

third condition is necessary: there must be *contact* between this germ and these friendly elements, such as moisture nd a certain degree of heat, for germination; and the nourishing elements both from the earth and the air for continuous growth. These three conditions; viz., germ, outside agencies, and contact of these elements with the germ, under favoring circumstances, constitute the trinity of growth.

Now here we have a type of the whole process of thinking, or the germination and growth of thought, the enlarged capacity and increase of power in the direction of intended uses. First, there must be a thinking agent — a soul associated with a sentient or impressible organism, answering to the germ of the plant associated with the kernel or seed, where the food elements for the infant plant are stored up.

This soul, or thinking, feeling and willing force, might, for all earthly time, at least, remain unmoved, ungerminated, undeveloped, were there not outside agencies, whose office is to arouse the soul to its wonted activities. The ordinary properties of matter, together with form, color, movement, etc., — where we perceive, at least, a faint prophecy of the coming sciences of physics and mathematics, — serve this exalted purpose. They are the heaven-appointed agencies for awakening the dormant energies of the soul.

But, as in the germ-awakening processes of the plant, these thinking, feeling and willing forces of the soul would still remain dormant, undeveloped, were these fertilizing elements — so to speak — kept separate and apart from the soul. That is to say cut off all possible communication between the soul and the outside world, and thinking, feeling, and willing were impossible.

This communication between the outer and inner worlds — objective and subjective — is commenced and carried on through the natural senses; as touch, taste, smell, sight, and hearing. in the case of plant-growth, there must be contact; first, d taste, and smell, which three, probably, give

germination of thought, or thought impressions — elements — answering to the seed germination: and second, indirect contact, as in case of seeing and hearing, which, like the light and nourishing elements from the earth and air to the plant after germination, and incipient growth have lifted it into these broader elements, lead the infant soul to incipient thought; and these continued processes of nature, aided by all the other senses, and unimpeded by the mistakes of man, soon open the doors of science and scientific research, until the acquisition of knowledge and experience nourish the faculties of the soul upon the true elements of more advanced growth.

The same law prevails in respect to animal life, and in a still more striking sense, as we ascend the scale of being. There exists, in this case, the germ, and the elements intended for its quickening; but kept separate and apart, there can be no life, no germination, no growth. But by natural contact, fertilization takes place, and the miracle of life is enacted; which life, fed by the appropriate nourishing elements, in due time, seeks parturition or separation. Birth gives expression to a higher class of wants, which, in turn gratified, the animal attains its majority, and, if properly guided, fulfills the mission of its existence.

It is precisely so in the germination, birth and growth of thought in the human soul. No sooner is the proper contact made between this soul — the thinking, feeling and willing ego of the body — and its environment, — the properties of matter, as color, form, texture, temperature, etc., — through the senses, — the avenues of this soul, — making due impression thereon through the sentient organism, whereby the soul's faculties are fertilized, as it were, the emotions and desires being stirred, than germination begins, and thought concepts are formed, which, when properly matured, seek parturition, separation, birth, or *expression*, as surely as do the young of animals. The processes are the same, and the law is the same.

These impressions being made through contact between the soul's faculties and the outer world — which world being formulated, becomes science to the young mind — germination takes place, and thoughts are born or expressed, which still follow the law prescribed for all natural growth and reproduction, and go out to reproduce themselves — the good ones and bad ones alike — begetting and rebegetting — everything after its kind — until the

domain of knowledge is enlarged, science developed, discoveries made, inventions increased, and human power advanced to its higher vistas through the improved faculties of the soul.

But mark! As bad, or imperfect thoughts are born and allowed to mature, they also beget after their kind; and this brood evermore opposes itself to the real progress of man. This is a significant fact in our history, or in the history of education; and it demands the most careful and candid consideration, while maturing our plans for the education of the young. The neglect of this is felt to-day in every department of business, and in every moral reform.

But to return to our figure. As the sunshine and the shower bathe the young plant in their warmth and in their genial embrace, the young buds expand and the flower bursts its cerements and sheds its fragrance and beauty upon the world; so, when the genial sunshine and shower of truth, or true knowledge, through *right teaching*, bathes the soul's faculties in their loving embrace, they begin to expand and open up to this genial warmth; thoughts are generated that burst their cerements, and go forth to shed their benedictions upon the race. For these thoughts seek birth or expression, as naturally and as necessarily, as the bud, the flower, or the unborn babe. Thoughts seek *language* as a means of expression; and here is the place to commence the cultivation of language. Expression is the garb, or flower of thought; and language gives color and sweetness to the flower. Thought expressed in chaste language, is the efflorescence of the soul. Thought expressed in impure language is the blasting of the beauty of the flower; while thought unexpressed or unborn, soon perishes, and its impression fades out.

The order of nature or creation as revealed by scientific discovery, is another hint at these laws of human growth. Geology, zoölogy, botany, etc., read us great lessons in the order and development of all forms of life. This order reads "from the simple to the more complex; and from the plain to the more ornate." This also is a law of language.

Emerson says: "Nature is the incarnation of thought" (God's thought), "and turns to thought again, as ice becomes water and gas. The world is mind" (the Divine mind), "precipitated, and the volatile essence is forever escaping again into the state of free thought." This is a beautiful, almost an inspired thought. The

child, when brought in contact with nature in her simplicity is filled with this volatile essence, and it must needs give expression to it, and it therefore seeks a language. It becomes a necessity and is most easily and accurately taught when asked for, by affording, at the proper juncture of thought evolution, the fitting type of expression. Thus, thought evolution and thought expression are inseparable in nature, and should ever proceed, hand in hand, through all the grades of learning. This reveals the shallowness of those methods of instruction in language that confine themselves to the mere form of expression, as in parsing, and the analysis of sentences, without corresponding synthetic exercises. It is not enough that the mere form of expression be given. The thought and *thinking* must be present to order the expression. The mind must struggle in thought evolution, at the same time it seeks thought expression.

Language taught for the sake of language is a failure. Language comes with thinking; and nature furnishes the conditions for thought. Her lessons and texts, rightly interpreted, are seldom misunderstood or unappreciated by the young. And her methods carried out in all our grades of schools, would not only economize in the matter of time, saving nearly all that is usually devoted to formal language lessons; but would give us fuller, richer, and more vigorous expression.

Language lessons should therefore be *thought lessons*, thoughts wrought out by the child's own efforts; which, after a little practice, or after the fountain of original thought is opened, become not only a pleasure far exceeding any mere copying of thoughts, but often an improvement upon thoughts furnished (not always the best) by authors. The child learns to think by thinking, thinking original thoughts, not merely conning second-hand thoughts, or thoughts made to order; which latter process should be credited with the class of second-hand men and women — men and women "made to order," — mere weaklings — with which the world is filled to-day.

These original language lessons have reference not only to the merely verbal expression of thoughts, but to thoughts expressed in color, form, movement, etc., as in practising, building, weaving, moulding, drawing, or the representation of objects in outline and color in which exercises the kindergarten is so helpful to little children.

Now the higher art, which is only another name for language, as architectural and mechanical drawing, painting, sculpture, and even music, and all forms of high art, follow almost as an inevitable result of this natural, or rather this rational mode of instruction, illustrating the law of mutual compensation; in that, while these arts are being brought to a higher state of perfection, man's faculties, both of thought and expression, are also reaping therefrom the benefits of a corresponding degree of perfection.

In this line of investigation, we shall also find a rational solution of the vexed question of industrial education (and there is no other), and manual training in our schools. The study of these laws of growth, as they apply to a human being, will reveal the fact that a being so marvelously complex in his structure, cannot be educated and *trained* for life's duties, nay that he cannot be brought to his best estate in any one of the many directions in which he was designed to grow, without the exercise, in a systematic, not to say scientific way, of all departments of his nature.

THE MAPLE PATH.

BY IDA A. AHLBORN, BAKER UNIVERSITY, BALDWIN, KANSAS.

The walk beneath the maple trees,—
  How grateful was their shade,
While on the leaves sweet melodies
  The winds of summer played.

How bare the branches toss and moan;
  The sun can boldly gaze
Where erst the wanton wind alone
  Gave entrance to his rays.

Deserted is the maple path,—
  Since once I loved it well,
It draws, despite of winter's wrath,
  My feet with magic spell.

The wind-swayed trees a converse hold
  Of Summer's memories;
Or thrill beneath the sunlight's gold
  With Summer's prophecies.

Since I have made the path my own,
  Me and the trees between,
A sympathy so deep has grown,
  Surpassing Summer's green.

SCHOOL LIBRARIES.

SUPT. M. B. C. TRUE.

THERE may be more than two reasons for the maintenance of school libraries, but I can conceive of but two proper reasons: (1) to furnish books of reference, as aids in the studies of the school, — encyclopedias, elaborate treatises upon the sciences, full histories, etc.; (2) to teach literature. Both reasons are proper ones and both objects ought to be kept in view in the purchase of books for all school libraries. Except in the higher grades of the high schools, the reference books will not be used very extensively, nor, without serious efforts on the part of the teacher, very intelligently. But for teaching literature, the school library has no present rival, outside of the home. It is better than a professor of literature. The pupils will study the books, *con amore*, which cannot be said, always, of their study of literature under a teacher. It seems to me that, if the school libraries should be universally established, on correct foundations, and maintained liberally and wisely, professors of literature would no longer be needed in college or university.

That school libraries are valuable aids in school work, I am able to testify. That pupils who have active access to libraries are better students than those who do not have such access, has been patent in my experience. Children, who are reared in a home atmosphere of literature, who take and read the best periodicals for young people, and who read books written for children of their ages, are brighter, more teachable, progress faster and more substantially in school work, and graduate — if they do graduate — with higher honors, than those not surrounded by such literary influences. In schools having good libraries, I have similarly found that pupils who take advantage of the libraries are among the best students. This is especially true of those who patronize the best class of literature in the libraries.

The school authorities of the country are growing in their appreciation of the influences which radiate from a school library. Every year, more under my observation in the Western states,

schools are added to the list of those having libraries; and every year, also, almost every school on the list adds scores of books to its shelves. This is probably true of all sections of the country. I am greatly interested in this growth of the library idea, but I am particularly interested in the direction of this growth, in the character of the idea, in the class, or classes of books which go into the libraries. For I do not believe that it will be seriously contended by anyone, even by the most careless, that there ought not to be some selection, some choice, in the gathering of these volumes, — that it matters not what goes into the library so that its shelves are filled.

In my view, there are two general guides to be kept in sight in the selection of books for a school library.

I. *Such books as the pupils want to read.* Of course, this must not be taken too literally. There must be a wise discrimination here. Most will admit, I think, that few children will read books which they do not want to read. All readers know that there is an intellectual, as well as a physical appetite. They know, too, that intellectual food, taken without appetite, is as indigestible as is physical food so taken. Intellectual appetite may be created, or recalled, but most librarians can testify, I believe, that books, for which readers have no appetite, will remain unread. In the selection of books, then, for a school library, some attention should be given to the wants, or desires, of the to-be-readers. I have said that an intellectual appetite may be created, or recalled. It may be that the appetite has been stunted, or depraved. In such a case, in order that the pupils may become good citizens, may grow into cultured men and women, the appetite for good reading must be stimulated, first, into activity, and then into the right direction. Professor Drummond, of Nebraska, told the State Association, a few years ago, that this activity should be stimulated at all hazards, even if the most sensational blood-and-thunder dime novel on the market had to be supplied for the purpose. A taste for reading *something* having been obtained, the wise teacher, superintendent, or librarian, can guide the pupil to higher planes. We cannot restore a depraved physical appetite by a continuance of the improper food which it craves; so we cannot restore a healthful, intellectual appetite by a continuance of improper intellectual aliment. The improper must be withheld, and the proper furnished. This will suggest the second guide.

II. *Such books as the pupils ought to read.* We must not be too arbitrary on this point, either, nor try to move too rapidly.

"Heaven is not reached at a single bound."

What ought children to read? If I may judge by the character of the books which I have found in the score or more of school libraries which I have personally examined, and in the reports of others, I know, approximately, what answers some others would return to this question. My answer would be far different from that of many of those who have selected books for many school libraries which I have inspected. I purpose to give three suggestions for the selection of books for the library of a graded school including a high school. These suggestions are based upon the same reasons as foundations, — I may, therefore, state these reasons first.

In the acquisition of information, in healthy, intellectual progress, we must proceed from the known to the unknown, — we begin with ourselves and with our surroundings, and explore toward the circumference of the circle of which we are the centre. In our primary rooms, we teach geography by a study of the school-room, of the school-grounds, of the school-district, of the township, of the county, and so on. We put first before the children the simplest, easiest problems in mathematics. We lead to a comprehension of the science (?) of language, by easy stages, along paths easy of ascent. We put them into the study of the history of their own country before we require them to learn the history of either foreign or ancient people. Thus we build our courses of study for school, college and university. I need not undertake to state the reasons for all this. Every educator knows the reasons. I would apply these reasons in the selection of books for a school library, — and, for that matter, for any other library designed for the use of children.

1. The literature furnished to children should be that of the *present age.* I need not tell the readers of EDUCATION that the literature of to-day is written in a style somewhat different from the style of fifty years ago, that changes in style have been going on from Caedmon to the present day. During the same time the language has been undergoing modification in orthography and in etymology, as well as in syntax. The language of to-day is the language which the child hears, sees, and speaks daily, and which it can best understand. The spirit of the age also changes

with its literature, and the literature of any age is imbued with its spirit. It is trite but true, that the first impression which a child, or an adult receives, makes the deepest, if not the most lasting impression. Now, if we want our children to be fully indoctrinated with the spirit of the present age, they must be fed upon the intellectual food of this age. In that delightful volume, "Over the Teacups" (p. 185), Doctor Holmes assures us of his belief, "that mind and body are much influenced by the kind of food habitually depended upon." As regards intellectual action, the same author (p. 109,) says; "One who has had the misfortune to soil his mind by reading certain poems of Swift, will never cleanse it to its original whiteness. Expressions and thoughts of a certain character stain the fibre of the thinking organ, and, in some degree, affect the hue of every idea that passes through the discolored tissues." There is hardly a doubt that expressions and thoughts, of any character, tinge the fibres of the thinking organ so as to affect the hue of every idea that passes through its tissues. Thus the thoughts and expressions of youth ought to be of such a character that no stain will be given to the fibres of the thinking organ. For I think that any affection of the fibres of the thinking organ such as produce hues out of sympathy or symphony with the spirit of the present age, or with the style of the present age, is, in effect, such a stain as Doctor Holmes means, or might mean.

2. The literature supplied to American children should be *American*. One object of the modern school, — the chief object of state schools in America, — is the training for good citizenship. One requisite of good citizenship is an intelligent love of country. We desire to train our children to such a love of country. How shall we do it? Shall we do it by familiarizing their young minds with pictures of other lands, their social and political institutions bathed in roseate hues by friendly limners? Do Catholics rear their children in the paternal faith by placing in their young hands the literature of Protestants? Do Presbyterians nurture their children in the atmosphere of the literature of Methodism or of Unitarianism, in the expectation that the children will thereby become early members of the church of their parents? Do we train our boys to vote the Republican ticket, by steeping their young minds in the atmosphere of Democratic literature? There can be but one answer to all these questions. Parents con-

sistently rear their children in the atmosphere of their own beliefs. When the young are so nurtured in the faith of their parents, and have arrived at maturity of mind and of character, then the literature of other denominations, theological, social, and political, may be allowed them safely. In the same way, we must indoctrinate our youth with a knowledge of American institutions, early in life, — we must train them in habits of obedience to the spirit of the American people, — lead them to an appreciation of the equity of the laws, the just administration of the same, — that the government is organized upon a foundation of righteousness and freedom, — that the social organization of the land is harmonious with the best aspirations of all good men, everywhere. Let them have these ideas well implanted before they are turned loose to browse in the cosmopolitan fields to which so many invite them.

The spirit of the Old World is different from the spirit of the New, — so the social and political organizations differ. I know the claim that truth is truth, by whomsoever spoken. This may be true, abstractly, but the media of communication are often stained, and, as Doctor Holmes might say, "affect the hue of every idea that passes through" them. A man cannot withdraw himself from his environments so far as to be able to present the characters of his story unaffected by the shades and lights of the social organization in which he moves. A historian, if a true citizen of his nation, cannot present a historic sketch of his own or of another nation unaffected favorably toward the government under which he lives, and few can keep from their pages evidence of such facts. The child believes almost all that he reads. Unconsciously, he feels a sympathy, or love for the institutions which a friendly hand depicts. I would make sure that the children do not learn to love any foreign country, in any of its institutions, before they have learned to love their own. The early story books given to children, at home or at the school library, should be written by Americans, and the stories should be laid in America, and be delineative of American society and of American life. I think that our Sunday-school literature is responsible for much of the false views of life, and of social relations with which the people of America seem to be permeated. It is just as important, too, that the biographies, placed in the hands of children, should be written by Americans, and largely relating to Ameri-

can men and women. In history, all concede, I think, that the United States should be studied first, but I would insist that, when, in later life at school, the histories of other lands are studied or read, books written by Americans should be used, if possible. The remark is attributed to George Bancroft, that the history of all Europe must yet be written from an American standpoint in order that we may obtain correct views of the events on that continent. We should act upon the suggestions of that remark in making lists of books for our school libraries. We want our children to have correct views of all history. The scientist may be cosmopolitan in his treatment of scientific problems, but in his illustrations he uses language adapted to the social conditions of his own country. The poet discusses truth and beauty irrespective of nationality, but he writes in the vernacular of his own people. Our children should learn first, the vernacular of America. I would make one more demand in this matter. I would see to it that the writers of whatever books go into the school libraries should be thoroughly in love with American institutions, heartily in sympathy with our social conditions, fully alive to the possibilities and probabilities of American growth and development. An American child should no more be allowed to read an adverse criticism of American institutions, and of American social conditions, than he should be allowed to read an adverse criticism of his family. His historian should be *en rapport* with the American people, and with their efforts to push their civilization to higher planes. His biographist should be filled with a love of the person whose character he depicts, and of the services which he details. His poet should be overflowing with genuine enthusiasm for American life and for American character. In my calmest moments I assent to the wild, spread-eagle statements of the Fourth of July orator, and I would have the books placed in the hands of the young students infused with the same spirit, toned down, of course, to more discreet rhetoric.

3. The literature should be suited to the *age* and to the *intellectual powers* of the pupils who are to read it. Our Readers, prepared for use in the schools, are graded to suit the age and attainments of the pupils using them. The text-books in arithmetic, geography, and language, intended for use in the lower grades of the schools, are made, at least the authors seem to try to make them, easier and more simple than the corresponding

text-books to be used in the higher grades. It seems to me that the same discrimination and wise choice should be made in the selection of books for school libraries. Books, which might, and ought to interest, entertain and instruct the learned superintendent, might be the dullest books for pupils of the high school, even, — how much more dull for pupils of the grammar grade, or lower. One inquiry should be: "Is the book suited to the comprehension of the child who is expected to read it?" A writer in *Intelligence* tells us that "we can really read that only to which we approach somewhat in stature and strength," and asserts that children "should have food adapted to them, however illusively they go through the motions of digesting strong meat."

Most of the books in a school library should be written expressly for children, — all such books intended for the younger pupils should be written expressly for them. Otherwise, the pupils will derive little, if any benefit from the books. Most books written for adults are written above the heads of even high school pupils, — and far above the heads of younger pupils. The style is too involved, the words are "too large," are used in higher, or more abstract senses than they have before known. Common words are used in more restricted, or in technical senses, and confusion thence results to the struggling minds of the youth.

There are books which do not meet the stern requirements of this paper, but which may properly and profitably be placed in the hands of school children, if the children are not too young. There is no "Robinson Crusoe" written by an American, and the foreign fabric should not be withheld. "Uncle Tom's Cabin" was primarily written for adults, as, also, was the "Hoosier Schoolmaster," but nearly all pupils of the grammar grade can fully appreciate both stories. Selections from "Grimm's Fairy Tales," and from the "Arabian Nights," may profitably be allowed to American children of ages of reasonable discretion. There are others of this class, which anyone who closely observes the intellectual pabulum which children crave can easily find. Anyone who cares to study the matter somewhat in detail can receive some hints from a paper entitled, "What my pupils read," printed in EDUCATION, September, 1889, and from another in the *North Western Journal of Education* for July, 1890. These two papers give the results of observations and experiments with children in the use of library books. They demonstrate, too, that

nearly all the books which may be said to be popular with children are such as I have pointed out above as the classes that they ought to read. Not many years ago, I took charge of a city graded school with a three years' high school course, which had a library of nearly three hundred volumes. One shelf contained about thirty volumes of poetry, and the only American poetry in the library was a thin volume of Poe, and a pocket edition of the short poems of Longfellow. The shelf devoted to literature contained essays by Locke, Bacon, Sidney Smith, Lamb, and Emerson, and Chambers' Cyclopedia of English Literature, and more of that class. The fiction was largely the work of foreign pens. Full sets of Dickens and Irving, with volumes by Hallam, Guizot, Motley, Rollins, Gibbon, Lubbock, Spencer, and Plutarch, adorned the shelves, flanked by a volume of sermons by Sam Jones. In the whole library there were but eighteen volumes that were drawn five times, or over, during the year. There were not thirty which meet the two conditions; the pupils *want*, and *ought* to read them. The paper last referred to shows how little the pupils did read them, as well as how eagerly they read the additions to the library, — the additions having been selected according to the suggestions of this paper.

A GRACEFUL TRIBUTE.

A gentleman who was a student at the great Scotch university in Edinburgh during the winter of 1869–70, relates an interesting story of an unusual and striking act of considerateness shown one of the university professors, Henry Calderwood of the department of moral science.

In the latitude of Edinburgh snowfalls are of rarer occurrence than with us, and when, in the course of two or three years, perhaps, it does happen that there is good snow for snowballing, the youngsters go wild over it, and even the university students are seized with the spirit of combat and what is known as "a snowball riot" is no uncommon thing in the annals of the university. During this winter one of these rare falls of snow occurred, and for several days the two or three hundred students held the quadrangle in a state of blockade, so that no one could come in or go out through the single entrance without running the gauntlet of

snowballs hurled by hundreds of vigorous arms. Indeed, the passersby upon the street were not safe, for through the barred gate of the quadrangle constant volleys of the icy missiles were showered. As the professors were not allowed ingress or egress except after nightfall, there were no regular lectures, and a spirit of mischief held sway, Professor Calderwood was a genial, sympathetic, broad-minded type of Scotchman who could recognize faults in a man and yet treat him as his equal and entitled to courtesy. As the other members of the faculty essayed to make their way among the riotous students, with frowning faces or looks and words of displeasure, they were so unmercifully pelted as to intimidate them against farther efforts. But presently Calderwood was seen to step forth from his room, and many curious eyes turned in the direction to witness him suffer a like fate with the others. As he advanced among the students who were waiting with their hands filled with snow for another victim, the Professor looked up and lifted his hat with as much grace and as pleasant a smile as if he had been in a drawing-room. Then with a polite word of salutation he went forward as undaunted as if nothing threatened him. In an instant manliness and courtesy had won the day and the snow fell from every hand and every hat went off in answer to his salute, and the Professor passed through the grounds amidst a burst of applause, which was at the same time a tribute to his intrepidity as well as to his popularity. J. F. C.

THE STUDY OF MODERN LANGUAGE.

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THERE was once a man accused of theft whose guilt was established in the mouth of a reliable witness who saw the act, but on the other side were produced two equally reliable witnesses who did not see the act, hence the innocence of the accused was clearly proven, the jury bringing in a verdict of not guilty.

I could not help thinking of this singular mode of rendering justice, so simple, so free from the perplexing details of ordinary legal proceedings, when I read in the January number of EDUCATION the article condemning the Natural Method of teaching languages by one of the witnesses who had failed to see the theft.

The number of those who have *not* witnessed its success is far in excess of those who have, consequently the testimony of the weaker side, i. e., of the minority who have investigated it with thoroughness, and who *know* what it has already done, who believe in its possibilities, is overborne by that of the majority who have not seen its good results. Somewhere I have read that there is more strength in minorities than a casual observer would believe. I heard once a well known lecturer speak striking truths apropos of remnants.

As an educator seeking constantly higher planes and broader outlooks, founding all my theories of teaching on the simple axiom that the greater includes the less, I cannot accept the verdict of those who condemn sweepingly that which from a philosophical standpoint appeals to my reason, that which from an ethical standpoint appeals to my admiration, nor can I set aside the testimony of my own eyes, even granted that the weight of evidence, if numbers be the standard, be against me.

A foreign language in its broad sense is to be considered as one of those units, developed by special conditions of land, race, custom, history, which all together make up the sum of human speech; not as an isolated thing, held in by strict boundary lines, governed by petty laws. The ideal teaching establishes this inter-relation and dependence of all branches of human study, how much more then the connection of sisters so closely united as various tongues. It is in language that thought is shaped, that sentiments are spoken, that transitory events are crystalized. Words like plants are living things possessing even more vitality, for in them lies the power of creation as well as of reproduction. Is it fair to withhold from the student this comprehensive view of human speech, not to let him feel from the beginning the elastic quality of language?

Each nation in developing its individual speech insensibly endows the latter with its individual peculiarities. It is homogeneous, strong, forcible, like the German, or, heterogeneous, broad, flexible like the English, subtle, polished, exact, like the French, musical, soft, rhythmical, like the Italian. It is something to be felt as an influence, felt in the individuality of its own peculiar presence, not transported from its native home into a foreign climate, i. e., turned always into another tongue before its truths can be assimilated. Dr. Hale describes the wonderful difference

between eating California fruits on their own soil, and the same fruits brought to us across the continent. From a humanitarian standpoint, I know of nothing more effectual in broadening human sympathies, and in dispelling human prejudices than the power of throwing the mind at will into the current of thought of another nationality, being German for the time being with the Germans, French with the French, and even,—for this is permitted to us under this method,—Greek with the Greeks.

On the assumption that the greater includes the less then, I must claim that the ability to feel, to think, to understand, to express one's self, be it ever so haltingly, in a foreign tongue, must include that other requirement as to whose desirability no one could be more assured than I myself, the power of "reading the classics," of reading them sympathetically, understandingly, with enthusiasm, with a far deeper appreciation of their subtleties and of their individual beauties than can possibly come under the old method of dictionary and translation. Here lies the chief merit of this system that it does give just this power. Perhaps a personal reminiscence may not be out of place. Having studied in the regular high school course with enthusiasm French and German four years, Latin five years, and Greek one year (covering in the latter a two years' course) I awoke one day to the realization that in spite of these years in the company of the foreign masters, my mind was utterly English. This came to me through no foreign influence, but suddenly as a conviction, when having allowed Latin to remain untouched for a year or two, I returned to it by chance, and found that while the old familiar texts held meaning for me still, anything new must be submitted to the painful process of translation before its ideas could find their way to my mind. Was this sensible, I asked. When as a child of seven or eight I was bid by an Englishman, a visitor at our house, to read for him, to show my proficiency, I turned to a poem on which we had been drilled at school. "Ah, no," said he, "We teach our children to read from any book. I do not call that reading." (I believe the teaching of our own language has made great progress in the direction of the natural method since those days.) Agricola I could read, but Germania in the same volume was a sealed book for me. Seized with a new idea, I read aloud slowly, thoughtfully, the first chapter. I re-read it, repeated it several times and continued this act each day for a week, each

time *feeling* more and more, first the meaning, then the beauty, then the marvelous strength of this condensed language, and for months I followed up the same exercise, reserving the critical study of the words in their finer shades for a more advanced stage. Soon I experienced the peculiar pleasure of feeling my self Latin, if I may say so, in my reading. English receded more and more, the words and constructions were to me something to be felt, to be admired for their intrinsic beauties. I was conscious of having made a valuable discovery that I was not slow to apply to other languages which became at once warm, sentient existences, not hard shells from which the kernel must be extracted after the laborious task of cracking apart. Later studies under native teachers brought French and German still closer to me, and in this receptive state I became acquainted with Dr. Sauveur's methods, with his books, which seem to me the most perfect embodiment of these self-formed theories that could possibly exist.

Nor do I base these convictions on my own experience alone. Having had the opportunity to see these theories applied in intelligent classes of pupils, hampered though they are by grammars written in English, and by text-books containing copious English notes and diluted vocabularies, I have been more than satisfied with the result. Interest is unflagging and the enthusiasm in study extreme. The verdict of the class is unanimously in favor of the foreign language as a medium for conducting their lessons, however difficult the subject under discussion. We are unjust to our pupils when we say they are unable to receive such instruction. Familiar through many years of intimate associations with our public school pupils, I am constantly amazed, not at their failures and short-comings, but at their power of work, at their quickness in assimilating all knowledge that appeals to their reason and their intelligence, and at their readiness to work persevereingly when the student-spirit is once aroused. For our American boys and girls this method of conducting foreign language teaching seems especially adapted. Did space permit I should be glad to substantiate this statement by proofs.

That the work accomplished in grammar by this method is thorough, I am convinced. That its educational value to the pupil is greatly enhanced by the work in a foreign tongue, I believe as fully, and that our children are capable of doing what is accomplished in the same line in foreign schools I have not the

least doubt. Just as thoroughly I believe in the value of reading when the pupil seizes the thought directly, needing not the mediatorship of translation, and in still another line of work, the comparison of idioms which they make by turning English into the language they are studying, their readiness to apply what they have read betokens a sympathetic study that has comprehended all that has gone before.

When I compare the work of students under this method with that which your correspondent quotes, I cannot refrain from asking myself the question if her so-called conversational method be in reality this natural method, this philosophical method, this leading of the student from the known, the concrete, the actual, to the unknown, the abstract, the ideal. "Learning to speak a few fragmentary sentences which mean nothing at all." It is not the aim of the natural method to teach this. It leaves to Ollendorff the glory of this work, busying itself not in the least with "Wie befinden Sie sich?" "Guten Abend," "Au revoir," etc. Its foundation principle is simply this, a foreign language should be taught by the sole use of the language itself. In the teaching of anything so vast as a language, it concerns itself but little with catch phrases. Were this the occupation of the student hours, your correspondent would be indeed justified in her objection. On the contrary, the hours not devoted to grammar, which receives the smaller half of the time, are given to that reading she demands, which is pursued with enthusiasm from the outset.

I do not wish to seem to underrate the value of translation from the foreign tongue into English. That it is of great educational worth I am convinced, that it teaches the power of concise language, demands critical study, enriches the English vocabulary, and gives a flowing measure to the English phrases,—but the chief benefit is for English, a legitimate study, the language above all other languages for the English speaking student, and in this light I value its discipline, but as a direct means of advancing him in the study of a foreign tongue, I cannot admit its desirability. Granting this its proper use, I should rather be inclined to place it in a later stage of study, regarding it as a consummation, a fruit, rather than as a cheap scaffolding, to be taken down and demolished as soon as the new structure can stand alone, a means to an end, rather than a noble end in itself; but teaching a foreign tongue through the medium of English is

like giving the young botanist drawings of plants instead of setting him to seek these plants in their native homes, — or the student of astronomy a chart of the heavens instead of inviting him out to lift his eyes in reverential awe to the planets and stars above him.

That the natural method employed in accordance with the design of its founder, is not only philosophical but practical, and immediately practical (that crying demand of our utilitarian age) is shown in the work it is already accomplishing. In one of our national schools, on the statement of one of its professors, this method is not only used, but enforced by strict laws laid on professors as well as students, with this result, that whereas under the old method of dictionary and translation, the graduates of a four years' course were utterly unable to enter into the simplest conversation with foreign sailors in the discharge of their duties, now at the end of two years, they are equipped with a language practical enough to carry them readily along in their dealings with French officials, a language which enables them to speak, read, and write intelligibly, and to advance in vocabulary and idiom without the task of unlearning and relearning which is generally found necessary by those who wish to know the language, but who, to quote from Professor Joynes, have thus far only learned about it. I know of an able teacher in one of our smaller New England cities, who having studied French only in this country, and by this method from Dr. Sauveur's books, uses it conscientiously in her classes, and won from a visitor conversant with our leading schools the well-deserved compliment that her class was the most excellent French class in every way that he had ever visited.

I have seen a charming young woman of the society type, at a table where only French was spoken, easily graceful in act and speech, follow or lead as the part fell to her in light, piquant table-talk, using idiomatic phrases with readiness, calling things by their right names, passing quickly from one subject to another, speaking with that smooth, rhythmical, *natural* running together of words and phrases, so unlike the talking-doll method of my school-days, while I sat speechless and ashamed. I have talked with her about her reading, and have wondered at her appreciative knowledge of French authors I had merely *translated*, a knowledge kindred to that which she has of Emerson or Tennyson or

Thackeray. She has studied only by the Natural Method. I have seen her begin German by this method, have watched her daily for six weeks, have admired her easy assumption of the new idiom, and have heard her read and translate at my request a page of German at sight after six weeks' study.

In our age of quick and easy travel, in our country whither foreigners from all lands come in increasing numbers each year, among a people fast freeing themselves from the stern, narrow restrictions of thought of the early New Englanders, it is hard to admit that the use of foreign languages cannot be kept up by those who have already acquired them. I enjoy often the pleasure of conversing in French or German, either with visitors who come to me, or in the homes of others. I am sure many lovers of foreign tongues in our large cities at least must have the same privileges. For two successive summers I have studied this system in its native home, the Summer School at Burlington, and then the daily hearing of foreign languages in lessons, in talks, at table, at receptions, in lectures, under whatever passing phase of life presented itself, proved to me that this acquisition of a language, naturally, as a child learns its mother tongue, is the best means of awakening in our students that enthusiasm and natural fondness for a language, the want of which under existing methods Professor Joynes so deplores in the article to which your correspondent refers, the presence of which in his judgment testifies to the worth of the study.

Nowhere else can this method be so well studied as at the feet of its master, Dr. Sauveur. Nowhere else are its largeness and its ideality so well read as in his series of books, carefully graded, never even in the first stages suggestive of the cheapening of thought by the teaching of disjointed phrases, but logical, educational, inspiring alike for teacher and pupil, and in their results natural, always philosophical. The child who is led through the charming pages of the "Causeries avec les-enfants" turns with delight to the "Petites Causeries" and the "Coutes Merveilleux," and the student of the "Causeries avec mes Elèves" approaches with understanding the wonderfully interesting chapters of the "Entretiens sur la Grammarie," a marvel among educational works.

No surer refutation of the charge of superficiality could be made than the simple invitation to the critics to examine the "Causeries

avec mes Elèves" in its latest edition, where in accordance with the movement already made in "Petites Causeries," Dr. Sauveur has added a supplement of exercises for translation from English into French, based in each case upon the chapter under consideration. Here, starting with simple, suggestive themes, the student is led gradually, always *naturally* to literary work of a high order; scholarly subjects out of the beaten track of "railroads," "railway stations," "porters," "luggage," etc., (See popular modern text-books), are presented to his mind, subjects elevating because they appeal to his original thought and to his imagination, educational because they lead him forward from the known to the unknown. Open to any page in this little book and see how the object of the teacher is truly to teach *language*, language behind which lies thought, and through language thought itself, whose true language is universal, whose evolution is or should be the final aim of every department of human instruction.

IS THE PUBLIC DEMANDING IMPOSSIBILITIES?

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THE programs of our common and high schools are, year by year, becoming more and more crowded with subjects. Public sentiment has recently demanded the addition of such topics as music, drawing and physiology. In some cities sewing has found a place, and even cooking is knocking for admission to the curriculum. Some branch of science is usually taught by oral lessons.

Public opinion demands another thing that crowds the programs of the lower grades. Many pupils leave school between eleven and fourteen years of age. The number is decreasing, year by year, as poverty becomes less common among the classes lower in the scale of wealth. Those parents, whose children leave school at twelve, demand that the course of study shall include, below the sixth year of school life, a large number of topics that have hitherto been taught in the grammar grades. They know that their neighbors' boy had studied history, percentage, evolution, and other grammar grade topics before he entered the high school,

and demand that their boy shall at least have a smattering of all these subjects when he leaves school, sooner, by two years, than the son of his rich neighbor.

The result of this demand is that the intermediate and primary grades are overloaded with a multiplicity of topics and branches. History, — ancient, modern, and American, is given to fourth and fifth grade pupils. Percentage is put still earlier, and fractions are presented to pupils who know little of the four fundamental processes, (or two, as the hair-splitters teach us). The question arises, can the child of ten, with his immature mind, grasp these subjects and processes, and, even if he can, one at a time, can he, when so many are presented in one day, or one recitation, obtain clear ideas of any? If not, the impossible has been demanded.

Teachers have been startled more than once, in recent years, by some man who has shown them that school children knew in the intermediate grades a shamefully small amount of language, arithmetic and geography. They have given too little attention to those branches, to say nothing of spelling and reading. High school courses in which grammar and arithmetic are found, would not exist, if the lower schools had done their duty.

Teachers are pressed for time. Recitations in some branches must occur upon alternate days, be made ridiculously brief, or two or more subjects must be treated together in one recitation period. The time is here, or will soon come, when the door must be closed against any new branches in our common school courses, or some of the old ones kicked out. Which shall it be?

Unfortunately for the pupils, some teachers choose to unite two or more topics, in one recitation. Others fall into the habit because it is easier to let a recitation drift over a dozen topics, than to guide it wisely upon one.

There is, it is true, a connection, more or less intimate between certain studies. History and geography touch each other in some places, and are suggestive of each other. So are reading and spelling. Some facts in physical geography have a causal relation to certain facts of history. Grammar should be understood by the pupil who attempts to analyze an example in arithmetic, because it is true that one branch may throw some light upon another, and that a recitation in one branch may be allowed to drift into another, when conducted by a teacher who has no defi-

nite plan of work, the unwise conclusion is reached that two subjects, as arithmetic and grammar, may be combined in one recitation, thus saving time and giving comprehensive views to the pupils. The teacher who does not know the essential elements of each branch, the faculties of the mind, nor what one is to be most strengthened by a given line of study, is most likely to err in this way. Because history has some dependence upon physical geography, it does not follow that the two are one study. The dependence may be pointed out, briefly, but the geography should be introduced only when it is absolutely needed to make clear the reason of the movements in history. Anything one whit beyond this is injurious, distracting, confusing and weakening. Correct language is desirable, but of far less value than power of thought and knowledge of facts, and therefore the teaching of language should never be made prominent in any recitation but grammar. It is more apt to be put into other recitations besides its own than any other branch.

It is not only the mixing of different subjects, that is sometimes advocated and practised, but different topics of the same subject are blended chaotically in one recitation. This plan is scarcely less reprehensible, and the objections against one apply to the other. In arithmetic this error is, perhaps, most likely to prevail. The pupil who is laboring with division, or common fractions, either of which is large enough to absorb his whole attention, can only be injured by any distraction from reference to decimals or percentage.

Professor Payne emphasizes the fact that there are not two psychologies, one of the child and one of the adult mind. He holds that the difference between the two is one of degree, only.

The reasons, however, of most weight for keeping every branch and recitation entirely separate, and teaching one topic or branch at a time, do not come from the relative importance, or relations of the subjects, but are found in the constitution of the mind, and the laws of the intellect relating to attention, perception, memory and reason. These are not abstruse nor hidden in books that are inaccessible. Teachers may know them, but, like pupils who know principles in the abstract, there is a wide gulf, often impassable alone, between the principle and its application. The relation of the two, if not taught together, in every branch, is rarely seen by a pupil. He may know the "cases" of percentage

as they are called, and when profit and loss is reached, or discount, but their applications may seem new to him. The systems of drawing, called industrial, may be taught for a long time, and the pupil may have a large vocabulary of geometrical terms, without being able to draw a single object. He supposes that drawing beautiful objects from nature is an art, quite distinct from what he has learned. But, as in one school system I have observed, when the application is taught with the principle, the pupil can actually draw objects and groups of some complexity. So the teacher may have studied Porter, Bowne, and Hopkins, and have at command most of the principles they have enunciated, and yet, in the school-room, violate nine-tenths of them. His mind does not connect the law, with the work he is doing. Everyone has heard many sound moral precepts which should, but do not, govern his actions, although he may admit their wisdom.

Since the spirit of confusion of studies, of mixing topics in recitations, is abroad in the land, working mischief upon innocent children, fastening upon them intellectual habits of a very debilitating nature, and wasting much time that should be utilized, it is profitable to discuss the psychological laws that bear upon this tendency to chaos. It is characteristic of the American people to try to hurry by attempting two things when only one can be done. Better things, however, should be taught by our profession, by precept and example.

In order to have anything clearly perceived or remembered by a pupil, he must give to it close attention, and it must be continued. The strength of the impression varies with the degree of attention, and perfect attention can be given to only one thing, or topic at a time.

The depth of the impression also varies directly with the length of time during which attention is given to the subject. A very slight interruption will distract very intense attention of a child. Time is lost before it can be regained, and the impression is thereby weakened.

It is also important to note that by practice, the attention may be held to a certain topic, often and for a long time, and yet it cannot be held to other topics for the same length of time. There may be said to be for each subject, a different power of holding the attention. The intellect cannot for a long time, nor with much intensity, consider a subject to which it has but rarely, and for a short time only, given any thought.

The farmer will study all day to learn the best way to manage a horse, or the best crop for a given field, but a half hour's sermon, or an hour's lecture upon a scientific topic cannot receive his attention. His mind will wander in spite of himself. The minister and lawyer find themselves unable to be interested in long discourses upon farm work. So the pupil who passes through school without having confined his attention frequently and for a period of some length, to arithmetic, or history, or other topics, without distraction, will lose the power of close attention to those very branches to which he has given thought but for two or three minutes at a time.

It is the work of a weak mind, of a non-thinker, to be unable to give close attention to one subject for more than a short time. We observe this in children, and in adults who are uncultivated or in their dotage. Their subjects of conversation are changed every minute or two. They are really tired after a few thoughts upon any topic. It is equally true that it is the characteristic of a strong mind that it can confine itself to one topic, for hours, and derive great pleasure from such application.

These facts in psychology have, in their practical application, a direct bearing on the tendency to confuse studies, and the value of oneness of purpose in all things at all times, and make plain some principles governing the action of memory.

President De Garmo, in his synopsis of Herbart's System of Pedagogics, makes the following statement to express the views of that master mind: —

"The piling up of one thing upon another is to be avoided. There must be singling out, separation, procedure step by step. Attention is disturbed by untimely pauses or the introduction of foreign matter; it is disturbed when that is brought into light which should have remained in shadow."

While the clearness and prominence of the memory of any given subject vary with the attention bestowed, there are other factors in the result, that are of vital importance in the consideration of our topic.

Professor Bowne says: "The logical relation of the parts constitute a bond" to aid the memory. Also: "Things once understood in their causes, connections and consequences are not easily forgotten."

President Porter says: "Those objects are more likely to be recalled which are *free from entangling relations.*"

Rosmini, in his Method in Education, speaks very explicitly on this point, and I quote verbatim: "The ideas commonly entertained about the manner of bringing order into the cognitions of children, are, as a rule, sadly incomplete and inadequate. The wise teacher will endeavor to procure three advantages for his pupil, viz: — 1. The assistance to his memory which is derived from the association of ideas. 2. The introduction, so far as it is possible, of unity into his thoughts. 3. The foundation of this order on a true, not on an arbitrary basis, that is, on the universal order of things.

Sometimes it is believed that all which is required in order to introduce order into the human mind, is to create the largest possible number of ideal associations. Memory and recollection are helped by any kind of association of ideas, but that order does not come from every kind of association. It is, on the contrary, the association formed from accidental and minute analogies between incongruous ideas which gives a frivolous, unstable, capricious and wholly illogical character to the mind. Delirium itself is maintained by a rapid and extravagant association of ideas. The frivolity of children has the same origin. We must, then, seek for sensible, in lieu of frivolous associations."

Is it strange that the psychologist and the profound physiologist arrive at the same conclusion? Dr. C. E. Riggs, who is recognized as the leading specialist in nervous diseases in the Northwest, and is fully abreast with the latest researches in his line in Europe, says, in a recent lecture to mothers: "Even among adults, it is by no means easy to maintain a clear idea upon several subjects at the same time; our best higher schools and colleges recognize this. The power of dissociation, that is, of keeping one subject entirely distinct from another, is very *limited in childhood.* The effort to do so, results to them in a quantity of heterogeneous ideas with perhaps, *not a single clear conception* of any of them."

This *one thing* I do, should be every teacher's motto to guide him in the recitation. He should be oblivious to everything but the particular topic in hand. He should not be "switched off" from the proper order of assigned topics by any ingenious pupil, who is disposed to follow a by-path, instead of the broad highway of some logical order. It is no indication of any really close connection between the two because a pupil drifts, if allowed to

do so, from history to geography. It is rather a mark of mental weakness. He will not do so in college, because he will have acquired the power of application to one subject for a long time. It would seem ridiculous to hear a college class talk one minute of chemistry, and the next of the Greek optative, and yet it would be no more so than to mix arithmetic and grammar.

As we proceed higher in the subjects of knowledge, there is a greater differentiation. What the high school boy knows as physical geography, the student of the university knows as a generic term, comprising geology, meteorology, physics, zoölogy, and perhaps other sciences. The sooner this differentiation of every subject is complete, the better, for the pupil's clearness of view. The relation and dependence of one branch upon another is often overestimated. The exact position of the battle-field of Waterloo is of little account to the student of history, because, so far as results are concerned, they might have been the same, had it been a hundred miles away from its present location. United States history and civil government are often taught together, and the plan is defended as a wise innovation. But the thoughtful historian knows that the plan of our institutions is the same, with some slight modifications, as prevailed among the Saxons two thousand years ago. Our history might have been different, but the plan, from the town meeting to the senate, would have been the same as it is.

The well known laws of the mind, which were quoted from accepted authorities, considered in connection with the very slight necessary dependence of any two common school subjects in the curriculum, lead to some practical and important conclusions which should be stated very specifically and explicitly.

The propriety of teaching every subject by itself, has been shown from the nature of the subjects themselves. The conclusions to be drawn from the nature and laws of the intellect, show the impossibility, as the mind is now constituted, of teaching, either clearly or economically, two subjects at the same time. It is never attempted in higher education, with stronger minds, and yet, below the high school, with weaker minds, it is sometimes affirmed that such practices as the teaching together of grammar and arithmetic, civil government and history, and the teaching of spelling and grammar with every subject, are philosophical. Such practices are based, as we see, not upon true psychology, but upon

a psychology that is little more than some one's aimless and debilitating reveries. The result of such a view of the proper use of the law of association of ideas is most disastrous in its results upon the child. It not only is fatal to close thought, but also injurious to the memory.

History, geography, arithmetic, physiology and grammar are subjects, the topics of which, when taken up in a logical order, are related to one another. In history and geography, at least, each fact is the effect of the one previously learned, and the cause of the next one. It is proper to lead the pupil to see the causal relation, both as an aid to the memory and as a means of developing the reasoning powers. But to go outside of history into grammar or arithmetic, and bring into the same lesson anything from those branches, is to bring into the topic what President Porter calls "entangling relations," and what Rosmini calls "accidental and minute analogies," which give a frivolous and wholly illogical character to the mind.

The ability to keep the attention upon one topic, and stand firm against the seductions of these "minute analogies" and "entangling relations" is the test of an adult's trained intellect, as distinguished from the child's frivolous and wandering trains of — not thought so much as reverie. The pupil who grows into the belief that "minute analogies" should lead our thought, is not likely to soon pass the infantile stage. And the calamity is greater if he comes to think that his spontaneous day-dreaming is a sign that he has passed out of his intellectual babyhood, because in that case, he is probably satisfied with his condition.

The subject takes one into broad and fruitful fields of investigation, but let the hints here given lead the reader to observe and think for himself in the regions adjacent to the road we have trod, and a brief summary of the more important propositions will suffice: (1.) The attention can be fully given to but one topic at a time. The power of close attention is the basis of clear and continued thought. (2.) Memory varies with the degree and duration of attention to a given topic. (3.) To attempt to give attention to several topics at a time results in confusion of ideas, which are not therefore retained. (4.) The closeness of the relation between different studies is often overestimated. Advance in knowledge is marked by a corresponding differentiation of subjects of study. (5.) To attempt to teach several subjects simul-

taneously is to weaken the memory, confuse the ideas, neglect the reasoning faculties, and waste time. (6) Teach one subject at a time, give it the whole attention. Association by cause and effect will bring together nearly all the facts in a proper and helpful arrangement. Association by close resemblance will surely make the circle large enough. (7.) Power to confine the mind to one topic and pursue the study in a logical order, without wandering, is the work of cultivated minds, and its increase the index of the progress of intellectual growth in the individual. (8.) Confusion and mixing of studies prevents this growth and keeps the pupil's intellect in the "frivolous" condition of childhood. (9.) These conclusions teach us that the demand for more branches in the course, and more topics in a recitation, term, or year, is unwise, and a compliance with it is injurious to the mind of the child.

EDITORIAL.

WE wish all our readers a "Merry Christmas," and a most "Happy New Year."

IT is settled at last that the next annual meeting of the National Educational Association will be held at Saratoga Springs, July 12–15, 1892. Saratoga is an excellent place for it, and President Cook may reasonably expect a great attendance.

WHITTIER, our beloved and veteran poet, is now rounding out eighty-four years of life. The people delight to honor the good old Quaker poet, who has added new power and dignity to the word — Friend. Benedictions upon him as he comes to his birthday on the 17th of December.

IT is well for college boys to endure some hardness. Few of them are now called upon to go through what their fathers or grandfathers did without a murmur. We are reminded of this by reading of Prof. Austin Phelps's college days. He was an unusually mature boy, and entered Hobart college, at Geneva, N. Y., in the fall of 1833, at the age of thirteen years. Writing to one of his sons, in 1874, concerning his student life, he speaks of it as follows: — "My father lived a mile away from the college. I had to board and sleep at home. The consequence was that I had to get up in the morning at half-past

five o'clock all winter, and at five in the summer, and walk before breakfast to the college for a recitation. Often it was so dark and stormy that I had to take a lantern to see the way. Then back to breakfast; then drive the cows a mile to pasture; then to college again for another recitation; then home to dinner; then to college for a third recitation; then to tea; then back to college, after driving the cows home; then, after an evening's study, go home again about ten o'clock. That was my day's work, day after day and month after month. I do not remember that I ever lost a recitation during the whole time."

EVERY great system of public schools, especially in a city, "catches" in succession every disease of childhood on the way to its final establishment in the confidence of the community. Just now, many of the most important of our American cities are wrestling with the agony of metropolitan partisan politics in the management of public education. The one advantage possessed by New England in common school administration is that, for two hundred years, more or less, every "town" in her six states has had experience of every form of the educational malady; — teething, chicken pox, measles, and mumps, croup, scarlet fever, diphtheria, and "nervous prostration." This varied experience in several hundred independent communities, deeply interested in popular education, has not been lost upon her growing cities. With remarkably few exceptions, the largest towns are well served by reasonably good school boards and sensible, hard-working superintendents, who are quietly gathering in the best results of the furious experimenting on the children under the name of "reform" to which new states and communities, "on a boom," are most inclined. Beyond the Hudson river the political habit is a far greater factor in society and, through these great progressive, powerful states, the public school is now wrestling in perpetual conflict with the political machine. The casting of the choice of state educational officials into the "hurly burly" of popular election compels the state superintendent of instruction to be a politician. The county system of superintendency comes in range of the same influence; while, in the majority of these cities, the most influential position, the city superintendency of education, is always at the mercy of a city hall ring. One result of this mixing of partisan politics and school administration is the periodical explosion of city school-boards, which seem to have a chronic tendency to decline until the whole community is aroused by some outrageous revelation. The unseemly wranglings of many of these bodies; their scandalous disregard of educational efficiency in the appointment of teachers; the violent and reckless experimenting in methods of instruction, organization and discipline; are too well known. More

than one of these great cities is notoriously sacrificing the schools to the personal whim of a little, disreputable clique; while hundreds of larger or smaller towns are being cheated out of fair results in the money appropriated for the children.

ONE of the most serious results of this demoralization is the growing difficulty, in many of our most important states, of retaining a city superintendent of education of first-class ability. Every metropolitan school-board is blessed with rival cliques, each determined to rule not only in the general legislation but the local administration of the schools. A common result of their bitter contentions is the common consent of the board to elect, as superintendent of schools, a popular, good-natured, easy-going man, adroit in sitting the fence and facing all ways, skilled in keeping out of the way at once of obstinate teachers and self-willed members of the board. There are great states of the Union in which scarcely one first-rate position of the kind is filled by an educator, not to say of national, but even of large, local reputation; while in several of the Southern states the progress of the public school is at a stand-still from the careless, or mischievous filling of county and village superintendencies with grossly incompetent men. Some of our most prosperous cities are thus sorely wounded in their dearest interests by the adroit "figuring" of a group of able politicians, playing into each others hands behind a showy figure-head of a superintendent; relying on the preoccupation of the intelligent classes and the ignorance and indifference of the masses to conceal the fact of the radical unsoundness and inefficiency of the system as administered.

THE most popular panacea for the "ready relief" of all the ills of popular education is educational woman suffrage. The logic of the proposition is irresistible. Woman is the mother of the generations; everywhere, and more than in any other country here, the educator and the formative influence of the child during the first ten most susceptible years of existence. Undeniably the advent of the superior young womanhood of the country into the national school-room, during the past thirty years, has been the most influential element in the educational progress of the country. Besides the wonderful development of improved methods of instruction and discipline for which she is largely responsible, her coming has changed the educational climate in which the child of to-day finds itself in school. Under this impulse an increasing number of states have conferred school-suffrage and office-holding upon women and many good people believe that here is the grand solution of all the puzzles of the school men. But the one weak link in this chain of logic is the unpleasant fact that, apart from

a growing but still inconsiderable class, the women of our country, especially the influential classes, up to this time have made no vital connection with the body of superior woman teachers; know even less than men of the great changes that are going on in every department of school-keeping; keep out of the way of and still hold in a modified social neglect the whole teaching class of their own sex; and, in general, are more felt as complainants and critics than students and friends of the schools. Even in Massachusetts, although women are everywhere represented in official educational life, the interest in school-suffrage is unstable and unreliable. So far society either turns its back on the common school or sends forth some magnetic and influential lady, inspired with a great "reform idea," probably suggested from abroad, to agitate for a radical change, with no adequate knowledge of the present situation, often destitute of the American sense competent to estimate the needs and possibilities in the training for American citizenship. All this does not prove that woman's school-suffrage is a failure, or not destined to become an influential factor in common school administration. But it does prove that even woman, with all her natural aptitudes, can only succeed in this new field when she follows the same law of success that has made her so powerful and beneficent in the home, society, and the school-room; — study the situation, find out what is actually being done — cherish a living interest in and cultivate a close acquaintance with teachers of every grade, and then, standing on the known, proceed "without haste, without rest," towards the unknown, where reside all the magnificent possibilities of perfected education in the good time to come.

PEDAGOGICAL PSYCHOLOGY.[1]

WHOEVER is searching for the literature which has a philosophical, a fundamental bearing on any subject, finds that cyclopædias, and dictionaries, and indexes may carry him a long way, and give him more to read than he ever can or ought to go through. But he often finds that the long road has taken him around his subject rather than into it. Without some instinct and training, the teacher simply does not know what to look for, or how to look at the mind before him; nor does he get a great deal of help from much of the talk about analytic and synthetic presentations and representations, — all of which is true enough, but the live person is more true than the dissected body.

[1] The Principles of Psychology. William James, Professor of Psychology, in Harvard University. 2 vols., 689 pp. and 704 pp. New York, 1890.

The attention of teachers cannot be called too much to the work of Professor James, if there are still any who are ignorant of its value. Never before have we had the science and the life of psychology brought so close to us, nor, in reaching down one hand to us, does it let go of philosophy with the other. I have referred to this work as "Pedagogical Psychology," because it does not call itself so; if you look in its index you find only six references under "Pedagogical Remarks"; yet there are many pages of practical illustration and application, especially the last seventy pages of the chapter on Will, which might have been indexed here. But it is still more in its principles that the book is what the teacher wants, since it starts from that conception of man as acting by reacting upon his environment, while it emphasizes the action as well as the reaction. "The soul *presents* nothing herself; *creates* nothing; is at the mercy of the material forces for all *possibilities;* but amongst these possibilities she *selects;* and by reinforcing one and checking others, she figures not as an 'epiphenomenon,' but as something from which the play gets moral support" (II. 584). This view of the mind as receiving its content from without, with only the power of assent or veto, magnifies both the successes and failures of education, for the teacher is both a part of that environment, pouring its stimuli into every wide open sense of the child, and, in so far as he is alive, he is also environer, consciously and sympathizingly making that environment in choosing between the stimuli which are to reach the pupil, until the child can choose for himself, until habit has given him strong interests in some directions and closed his senses in others. Here again, in the pupil's power of choosing lies still the responsibility of the teacher; what the will affects, according to Professor James, is to attend to an idea: "the effort of attention is the essential phenomenon of will" (II. 562); and though he places freedom from the environment in this effort of attention, he says again that "voluntary effort is always derived" (I. 416), and "there is no such thing as voluntary attention sustained for more than a few seconds at a time" (I. 420); "sensitiveness to immediately exciting sensorial stimuli characterizes the attention of childhood and youth; any strong sensation whatever produces accommodation of the organs which perceive it, and absolute oblivion, for the time being, of the task in hand" (I. 417). Thus, while Professor James believes there is in the person a power, to which we can appeal, to choose the harder task, to resist the more seductive pleasure, that power is not like a guardian angel to come in and take the place of the individual's self or of his environment. We may call that power the warning of Conscience or the sense of Duty, and imagine it endowed with some magical force so that we may throw it into the scale with the dry, tedious, unexciting

action and weigh it down against the most enlivening and attractive pleasure; but this empirical psychology leaves us no such personage to appear on the scene just in the nick of time, as in the romances, to save the good knight from being overwhelmed. Voluntary attention or the effort of will is reduced to a knife edge; "the terminus of the psychological process in volition, the point to which the will is directly applied, is always an idea. The only resistance which our will can possibly experience is the resistance which such an idea offers to being attended to at all" (II. 567). Strength of will, then, is only in holding an idea in the focus of consciousness, only in thinking; but this is merely the inner end of the process; whether that thinking is easy or hard depends on the parts of the brain which are beyond the momentary control of the thinker. This citadel of the soul can be held against assaults from without only by allying itself with some of those external forces against the others. All through his work, Professor James makes much of *Interest* as that which gives the idea its power, and interest depends on the associations which cluster about an idea and follow in its train; "no one can possibly attend continuously to an object that does not change" (I. 421). The very appearance of a person before us or of an idea in consciousness, in so far, has our attention; in that single moment is decided the effect of that person or idea, according to the other ideas it is coupled with. Thought is in the view of the author, not a string which might be at any moment cut loose from previous thoughts, but it is one of the characteristics of his system to regard thought as a "stream," in each pulsation or ripple reproducing by association, memory, and habit all its past. Each moment of thought is one idea, he holds, embracing many objects, and association is "between *things thought of*—it is *things*, not ideas, which are associated in the mind" (I. 554). It is, then, the order of experience; the order in which objects come before us, either directly or in memory, that decides what the content of that stream shall be. Will, then, is nothing apart from the other aspects of mind; it is attention, attention is interest, interest is association, association is experience, while "my experience is what I agree to attend to" (I. 402), and thus "the interest itself, though its genesis is doubtless perfectly *natural*, *makes* experience more than it is made by it" (I. 403). So the outcome is the very problem of education,—the action and reaction of person and things, the appeal to attention and self-control and at the same time so regulating the environing stimuli that they shall bring as a natural consequence the habit of attention without effort to the proper things; we are to presuppose in the child a will in order to develop it, to regard him as actually free, above the power of things, only in so far as better objects, which are equally real and warm for him, have

already preëmpted the ground those things would cover. We may then appeal to the voice of conscience and the sense of duty, while remembering that "conscience" and "duty" mean to each one just what their associations make them mean. Thus empirical psychology ends in a paradox, but all the more helpful to us for that, since real life is such a paradox; we are each following a circle, and the straightest arc only seems to be straight; we see neither the beginning nor end of anything, but only its direction; we take up the work of others where they have left it and make the most of it, and we leave the scene of each labor re-echoing those pathetic words of the master teacher: "I have yet many things to say unto you."

Such a view of the human soul as this psychology gives us, shows the work of the teacher to be vaster in its consequences for good or evil than we ever felt it; it magnifies the importance of education, but so increases the possibilities and uncertainties of human nature that it minimizes the efficacy of any particular method. Viewed in the light of such principles, education becomes, as we would wish it, less than ever a trade, more than ever a vocation; not in the sense that he would put enthusiasm and inspiration in the place of mechanism and method, but he would have feeling and emotion impel and pervade what well regulated thought had already mechanized. No principle is more prominent in his system than that of the importance to conscious ends of unconscious habits. "Habit is the enormous fly-wheel of society, its most precious conservative agent. It is well for the world that in most of us, by the age of thirty, the character has set like plaster, and will never soften again" (I. 121). Indeed, there could be no more effective supplement to the religious and ethical exercises than reading to the school, when old enough to understand, the hortatory remarks on the growth of character through habit (I. 120–127); on the intellectual objections to cramming (I. 663); on belief as the result of action (II. 321); on controlling the emotions (II. 463 and 466); on procrastination of effort (II. 547); on the morality of attention (II. 563); on making and breaking resolutions (II. 565).

The preceding, where not in the words of the book, represents, I think I may safely say, its spirit, a spirit of inspiration and enthusiasm which lives, not in spite of, but by reason of, its foundation in empirical and experimental facts. J. P.

CORRESPONDENCE.

Editor of EDUCATION: — I was very much interested in Miss Shute's admirable article on Composition in the November number of EDUCATION, and was glad to have the testimony and thought of one so worthy and well qualified to speak on this most important subject. While endorsing most of what Miss Shute urges in favor of better methods in teaching composition in the schools and joining with her in her condemnation of those methods which do not in any degree appeal to or develop the imagination of pupils, I am forced to enter a mild protest against too much attention being given to composition considered as a purely language exercise and primarily designed to stimulate the inventive and reflective faculties of pupils. My observation convinces me that there is too much time given to composition work in our schools, and this time is taken from the time set aside for language work in which time, if language is to be considered as a means of communicating thought, too little is given to oral expression of thoughts and impressions. In most schools no attention whatever is given to expressions of thought orally. Conversation is never permitted, talking as a language exercise is not known, and we are in danger of becoming a silent people. Granted that lessons are recited orally, yet rarely is criticism given to the choice of words, arrangement of ideas, diction, etc., while the pupils are reciting or afterwards. Either the language of the text-book is reproduced by the pupil and he thus becomes a faithful echo, or there is a translation made by him, of the thought, into his vernacular and the vocabulary of the talking exercise is never permitted in the composition exercise. More time should be given to talking and talking should be criticised as carefully by the teacher as are the compositions handed her by the forced pupil. When our schools insist that pupils shall talk in sentences, shall take care in the selection of their words, and shall be as ready with tongue as with pen, then we shall have men and women who will know how to speak their thoughts in an intelligent manner and grace their conversation with choice words and well turned phrases. P.

Editor of EDUCATION: — *In re* the new school law in England, inquired about by Gamma in November number of EDUCATION, permit me to quote from a recent letter to the Boston Transcript, written by that incomparable correspondent, Edgar L. Wakeman. Writing of the British Ragged Schools, he says, "The so-called 'Free' Education Bill, passed by the last British Parliament with such high exultation, is

not a bill for free education. The English government has merely given a grant of ten shillings a year, per capita of attending scholars, to all elementary standards. It is simply an 'assisted education' measure. And it only assists in the matter of fees to the three-pence per week point. Beyond that, the additional fees, on the former basis, must be forth-coming, under penalty. And it in no wise limits, affects, or lessens the child-baiting among scholars or ignominy and persecution of parents, nor in the slightest degree modifies the inhuman system, which has made possible or necessary these British Ragged Schools." M. T.

Editor of EDUCATION: — The question of employing married women as teachers in public schools is attracting not a little attention at the present time. I have seen several communications on the subject in the daily papers, and from the vehemence with which the letters were written, I take it that there is much feeling at the bottom of the question. As the letters to the editors of the papers were all signed by feminine names, it is needless to state the side of the question taken by them. I do not know what regulations may have been made by school boards, but I, for one, am unreservedly opposed to the employment of married women as teachers in our public schools. I have never seen an argument advanced which would convince one that married women would make better teachers. The reasons adduced all fall under the catagory of special pleading, and "woman's rights." I hope the subject will be thoroughly aired in the periodicals, for I believe the good sense of school officers will see to it that those young women who have deliberately chosen a profession and have been years fitting themselves for it are not crowded out of places coveted by those who have contracted unfortunate marriages and have indolent husbands to support. SEPTUAGENARIAN.

Boston.

FOREIGN NOTES.

Movements Affecting Secondary Instruction. — Problems of secondary education continue to engage serious attention in European countries. The practical bearing of the discussions is much more evident in those countries than in our own because in the former secondary schools are the only avenues to university courses, that is to the training demanded for the learned professions and for official careers. The attitude assumed by the German emperor with respect to classical studies has as yet occasioned only slight modifications in the programmes of Prussian gymnasia, nevertheless it has given a distinct advantage to the moderns. In England there is an evident weakening

with respect to Greek, although it bears rather upon the method of instruction and the universality of the requirement than upon the intrinsic value of the subject for purposes of discipline and culture.

In May last a meeting of the University Senate was held at Cambridge for the discussion of the following *Grace:* "That a syndicate be appointed to consider whether it be expedient to allow alternatives, and, if so, what alternatives, for Greek in the previous examination, either to all students or to any classes of students other than those already exempted." The Grace was subsequently amended by the substitution of the words "one of the two classical languages" for "Greek." In this form it will soon come again before the senate at which time it will be proposed to nominate a syndicate with instructions to report to the senate before the end of the Lent term, 1892. In the preliminary discussion in May, among those who advocated the proposal were Dr. Peile, Master of Christ's college, Prof. Henry Sidgwick, and Dr. Montagu Butler, Vice-chancellor of the University, who pleaded for two classes of boys: (1) those to whom the study of two ancient languages was a greater burden than they were intellectually able to bear, and (2) those whose natural gifts predisposed them to some branch of science. The account of the discussion in the Cambridge University Reporter (June 9, 1891) gives the impression that more was said and more forcibly in favor of the present requirements than against them.

Mr. J. K. Stephen was particularly eloquent in his advocacy of Greek which is the more noticeable because the classics did not form part of his university education. He declared "that the fact that he was taught Greek from the age of ten to nineteen was the part of his education which he valued most highly at present." In his judgment "the value of the study of Greek in hardening the intellectual fibre of the student's mind and also introducing him to a clear and comprehensive, but not unduly extended view of the most interesting civilization there ever was, at a time when the attitude taken up towards life was of the most instructive character," is "almost incalculable."

Mr. Mayor, professor of Latin, deprecated the modern tendency which fixes attention upon verbal forms rather than upon subject matter. Among others who spoke on the side of the classics were Mr. Austin Leigh (the Provost of King's college) and Professor Jebb, the distinguished Hellenist.

In the annual conference of The Teachers' Guild of Great Britain and Ireland, held at Manchester, September 8th–10th, secondary education was the theme of two important addresses, one by Professor Lawrie on the "Curriculum of Secondary Schools," and the other by Sir George Young, on "State Organization of Secondary Education."

Both addresses are given in full in the Journal of Education (London), for October. Dr. Lawrie would make language the central subject both on account of its disciplinary and its ethical value. He is in favor of making Greek optional, and would develop his secondary course around English and Latin.

Sir George Young entered into a detailed consideration of the province of the state in respect to secondary education. He recognized the need of its fostering care in the way of funds, required guarantees, etc., but deprecated its interference with curricula, examinations, or scholastic standards.

The classics were introduced into Russian programmes about fifteen years ago through the influence chiefly of two publicists Katkof and Leontief. They encountered the solid opposition of the press and the universities. The death of Michel Katkof afforded recently the occasion of a renewed attack upon the subjects of which he was the most eloquent advocate. A return to the ancient system seemed imminent when the Czar added the weight of his authority to the influence of a few members of the supreme council who favored the existing courses of instruction. In view of the renewed agitation of the subject the principal articles published by Katkof in defense of classical instruction have been collected in a volume entitled "Our Educational Reform," "Nacha Outschebnaia Reforma." The most incisive of these articles has been reproduced in "*La Nouvelle Revue*" of July 15, thanks to the enterprising spirit of the editor, Mme. Adam from whose introductory statement the foregoing facts are derived.

The most decisive measure, however, affecting secondary programmes, is the decree issued by President Carnot the eighth of August last, modifying the French baccalauréat. For the three degrees hitherto attainable; i. e., Bachelor of Letters, Bachelor of Sciences and Bachelor of Sciences restrained, there is substituted a single degree. Election of courses will be permitted during the last year (i. e., *Philosophie*), and according to the choice made the diplomas will be inscribed

(1) *Letters, philosophié;*
(2) *Letters, mathématiques;*
(3) *Letters, sciences physiques et naturelles.*

To understand the full significance of this scheme it is necessary to have clearly in mind the previous arrangement. Under this, the organization of the French lycée was as follows: —

Elementary division.	AVERAGE AGE.
Classé preparatoiré.	
Huitième,	9 years.
Septième,	10 years.

Certificat d' études to be obtained before admission to the next division.

Division de Grammaire.	AVERAGE AGE.
Sixième,	11 years.
Cinquième,	12 years.
Quatrième,	13 years.

Certificat d' études necessary for advancement to the Troisième.

Division supérieure.	AVERAGE AGE.
Troisième,	14 years.

Classes de lettres. — Seconde, 15 years, Rhétorique, 16 years. First examination for bacc. és lettres. Philosophie, 17 years. Second examination for bacc. ès lettres.

Classes de sciences. — Mathematiques prepar. Mathematiques, élémen. Examination for bacc. ès sciences.

From the above prospectus it will be seen that the degree of Bachelor of Letters required two examinations, while that of Bachelor of Sciences was awarded after one. Moreover, the former degree indicated a course of study one year longer than the latter.

As a result of the new decree, all candidates for the baccalauréat will be placed upon the same level as regards the number of years in the course of instruction, and the number of examinations to be passed, i. e., two at the interval of a year. The fact that all aspirants must now pass through the class of rhetoric, must be regarded as a triumph of the literary over the scientific side, and that in the only country which has seriously attempted to equalize the two. The new programmes elaborated in conformity with the decree give further proof of the ascendency of the "humanities."

This movement in France is reflected in the journals of the day; among the most interesting articles which it has called forth are several in the *Revue des Deux Mondes*, for the past year by Mm. Fouilleé and Michel Bréal.

The new law with respect to requirements for degrees in Belgium which went into operation, October 1, 1890, must also be regarded as affording a triumph for the classics. Hereafter both Latin and Greek must have been studied by candidates for the degree of Doctor of laws, or of medicine, and Latin at least by notaries and pharmacists. The bearing of this law can not be clearly seen without a knowledge of the movements affecting the Belgium universities during the last half century. This is not the place for such a survey, it must suffice to say that a law of 1876 consecrating the principle of "liberty of instruction" did away with entrance examinations. The consequence was a crowd of

immature students pressing for scholastic honors, the present law is intended to restore standards of scholarship rather than to give an impetus to any particular subjects.

MISCELLANEOUS NOTES.

The teachers' association of Belgium (*Congrès des Instituteurs*) convened in September at Brussels. The discussions of this body are always timely, forcible, and pungent. The most exciting subject during the present session was that of school savings banks against which the congress pronounced by a vote of 119 to 86.

While this disposition has developed in Belgium the system grows in favor in France, and in England at this moment official action has been taken with a view of inducing parents to permit their children to deposit in school banks the weekly savings arising from the remission of school fees.

An experiment is about to be tried in San Salvador, with a view to fitting women for posts in the public offices, as post-office clerks, printers, telegraph, and telephone operators. Schools are to be established where free instruction will be given in these branches. The administrative organ expresses the hope that this is the entering wedge for opening the learned professions to native women.

Efforts are being made in many cities of Germany to form special classes in elementary schools for children of weak intellect. In Frankfurt and Kassel such classes have been successfully maintained. They are in charge of teachers specially trained for that delicate task.

In June last the London School Board authorized the appointment of a superintendent to take charge of the organization of similar special classes in the metropolis. The choice has fallen upon Mrs. E. M. Burgwin, one of the board teachers, who has been granted three months' leave of absence with full pay, that she may study the workings of such institutions. The salary for the new position begins at £300 ($1500) and rises by successive annual increase of £10 to £350 ($1750).

According to a recent official report, Berlin maintained, in 1890, public primary schools to the number of 184. These were attended by 172,778 pupils, and employed the services of 3.800 teachers.

A recent account of the suicidal fever among the school youth of Berlin states that the number between twelve and fifteen years of age who killed themselves in 1890, was 62, i. e., 46 boys, 16 girls. No explanation of the strange tendency is attempted. A. T. S.

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned.

Besant, Mrs. Annie. Character Sketch. *Review of Reviews*, Sept. An interesting psychological study of one of the women who are talked about. The editor quotes from her autobiography, to which he refers as "an authentic narrative of the soul journeyings of an intensely religious soul from Evangelicalism to Puseyism, and thence through Broad Church Theism to the flat negations of an Atheistic Materialism, out of which she has emerged, by way of Spiritualism, into the realm of Theosophy."

Bodleian Library, The. *Quarterly*, October. Annals of the library, telling how this was one of the few institutions in England which escaped the effects of political strife. Its greatest abuses from remaining too long under the management of old librarians; for ninety-three years in succession, it was in the hands of only two men, Price and Bandinel. "The librarian seems to have regarded it as a quiet sleeping-place and the reader as an impertinent intruder."

Catholicism in the Waverley Novels. Thomas Canning. *Dublin Rev.*, October. "Scott, more than any writer, except Dante, has drawn his inspiration from Catholic times and Catholic models. Is his ideal the Catholic ideal?" "He has presented us with a galaxy of stirling Catholic characters, nursed in the bosom of Holy church, but for that church itself who made them what they were, he has few words of praise." "He habitually presents the weaker side of Catholicism: hence, he has many Templars, not one Hospitaller." The writer attributes to Scott the merit of having done much to remove English prejudice towards Catholicism.

Cowper's Letters. J. C. Bailey. *Macmillan's*, November. "They are written in the most beautfully easy English, and he steers his way with unfailing instinct between the opposite dangers of pompousness and vulgarity," "He has the best subject, because he has no subject at all, and so he is led into quiet, gossipy self-revelation."

Dickens and Daudet. *Cornhill*, Oct. "Their common aim — the leveling up of the lower classes." "They both show evident appreciation of boyhood. Their types of children are characteristically distinct, for in boyhood the natural traits are less modified by the idiosyncrasy of the individual than comes to be the case later."

Direction chez les animaux, Le sens de. E. Alix. *Revue Scientifique*, Oct. 24. An animal carried a long distance from home, boxed up, in a strange vehicle, by a strange person, when let loose, finds its way home, by using its senses of sight and hearing, and especially of smell; it has no special sense of direction, any more than a man has.

Enfants, La question des. Henri Joly. *Correspondant*, Oct. Double complaint in France that there are not enough children and that many that are born are neglected. "When the question what social justice owes to the child in preserving it from wrong, has been answered, that other question may be approached, what does justice owe society in preserving it from youthful criminals?"

Französischen Sprachunterricht, Zum. Karl Dorfeld. *Phonetische Studien*, Band V. Heft 1. The "natural method," taking numbers as material for conversation; counting, addition, etc.; counting out rhymes, e. g. un, deux, trois, j'irai, dans le bois."

French and English. Miss Bentham-Edwards. *Fortnightly*, November. "The vast majority of French women being convent-bred, are still wedded to dogma and the reactionary principle; men to a spirit of enquiry and the democratic idea." "A feminine plébiscite at the last election would have brought Boulanger into power and restored the temporal

power of the church." "Daudet has well depicted the consequences of marriage for marriage's sake, that blind idolatry of the one child of the house. The French child is a fetish." "Artificial bringing up is one of the most potent causes of the French mania of self-destruction."

French Province, Life in a. *Longman's*, November. "It is only in the provinces of France that one can now realize loyalty as a passion. Old Anjou is a hundred years behind her time." "But they would never have consented to use Boulanger as a cat's-paw. 'Some of our friends think,' said a Frenchwoman to me, 'that he may be useful, as a broom, to sweep out the Republic. But we will have nothing to do with him. He is a bad man.'" Referring to the melancholy youths, the writer adds: "It is a bad time for young men in France now."

Jesuit College, Life in a. H. Dziewicki. *Nineteenth Century*, November. "Every weak point of every character is soon found out, and war is waged against it in different ways; sometimes secret orders are given, and he is set upon and teased for trifles while the master is most particularly kind and encourages him to bear up against these trials of temper; in other cases, when he is too weakly and sensitively attached to the master, the latter treats him for months together with affected coldness."

Letter-writing, The Art of. *Saturday Review*, Oct. 17. "Among our most venerated superstitions is the belief that letter-writing is a lost art. Our forefathers wrote letters of enormous length, but just as uninteresting as our own. We are deceived in our general estimate by having read only the best."

Libraries and Librarians of the Pacific Coast. F. H. Clark. *Overland Monthly*, Nov. "Nowhere is the library spirit of California towards libraries more clearly shown than in the provisions for school district libraries; for this purpose, the law sets aside ten per cent. of the state school money apportioned to the district, not to exceed fifty dollars." But much of it is spent for worthless apparatus or for books beyond the understanding of the pupils. The state library should guide the schools in this matter, is the opinion of the writer.

Lincoln, Abraham. *Quarterly*, Oct. Review of the book by Nicolay and Hay. Referring to the President's countermanding General Fremont's proclamation abolishing slavery in Missouri, it says: "The late Mr. Lowell, and many other Americans of distinction and influence, severely censured England because it had always condemned slavery, and yet, when a war for the abolition of slavery was undertaken, it sympathized with the South. But the English did not and could not see that it was a war for the abolition of slavery, and in that respect they were not more blind than the Americans themselves."

Oxford, The Schools at. S. E. Winbolt. *Atlantic Monthly*, November. "The fellows and scholars form the real nucleus of a college, and, supported by its endowments, they feel themselves bound to maintain by serious study its character for learning. Commoners are more numerous; as a rule they are inferior to the scholars in ability and attainments." — "A fellow of the college is assigned to each man as his tutor, to supervise his work, control his reading, choose for him his lecturers, and advise him generally."

Pygmées et les nains de l' Afrique équatoriale, La legende des. P. Monceaux. *Revue Historique*, Sept.-Oct. The evolution of the accounts of pygmies in Africa, from Homer to Swift's Lilliputians, and the confirmation of the story by modern travellers. All the pygmies live in equatorial countries, in Africa, India, and Oceanica, and are characterized by small bodies and narrow skulls.

Russia, The demoralization of. E. B. Lanin. *Fortnightly*, Oct. "There was a time when the Russian people were as completely equipped for their part in the struggle for national existence as were most of those who are become the successful nations of today. It was when, split up into a number of petty principalities and republics, they were honest, believing pagans. Centralization gave them Muscovy, and Byzantine Christianity sowed the seeds of irreligion, superstition, fatalism, and Nihilism." — "Whenever a peasant community manifests an inclination to grow sober, it is regarded and treated as a disaffected crew."

Shakespeare, Naturalist. *Gentleman's Magazine*, Oct. "Not only the tenants of stall, stable, kennel and

sty, but also wild animals — here too, he shows a remarkable breadth of view and shrewdness of perception. We can point to scarcely one British quadruped of which he has not something to say and something worth saying, nor is his range limited to either 'British' or 'quadruped.'"

Schlaf und Traum. Moritz Alsberg. *Unsere Zeit*, Heft 10. Dream ideas not only resemble those brought by the senses, but they are the same; ideas in dreams, just as those in the waking state, are called up by stimulations of the senses. Dreams, which seem to last years, passed through in a moment, because in waking reality so much time would be required to account for their circumstances."

Shop girls and their wages. J. H. Hyslop. *Andover Review*, November. Organized help of two kinds: 1st, to see that they get the wages they have been promised; 2nd, to raise wages or prevent their reduction, and escape effects of competition. The first aim is only a matter of justice and has been reached in thousands of cases. The second, not so simple. "The struggle for existence must play havoc with human morals so long as there is no limit to its influence. Protective unions and boarding houses will do a good work, but they will not meet the difficulties presented by increasing population, a point which is wholly unconsidered in ethics, and only mentioned in economics."

Suburbs, The rise of the. Sidney J. Low. *Contemporary*, Oct. Fears caused by change of population from country to city, alleviated by looking at the suburbs, which combine the advantages of both. "The tendency of modern sport is all in favor of the man who lives near a town, as against the man who lives in the country." On the problem of rapid and cheap transit depends the growth of the suburbs.

Training: Its bearing on health. Sir Morrell Mackenzie. *New Review*, October. "There is a fundamental difference between adolescents and adults in this, that though the former may be actually the stronger men as far as muscle is concerned, they have much less staying power than the latter." — "Nothing like systematized training should ever be attempted before the growth of the body is nearly completed. Growing lads who have to do work beyond their age often become stunted in stature, and it has been observed in French lycées that boys have stopped growing at as early an age as twelve, in consequence of excessive practice in the gymnasium."

Unsectarian Moral Instruction, The problem of. Felix Adler. *Inter. Jour. of Ethics*, October. Attempts have been made to satisfy the problem by eliminating differences between Catholics, Protestants and Jews; but there are some, e. g., Agnostics, who are none of these. The writer objects to every method of teaching religion or sectarian ethics in the public schools, and would have only the subject matter of ethics taught, not the sanctions. "The conscience can be enlightened, strengthened, and always without once raising the question why it is wrong. It is the business of religion and philosophy to discuss the ultimate sources of moral obligation."

Virchow, Rudolf. *Deutsche Rundschau*, November. His preëminence lay in showing that the cell is the germ, not only of life, but also of disease. One of his most important contributions to pathology is the theory of metastasis, — that diseases in widely separated parts of the body are caused by diseased cells carried from one part to another. He was opposed to teaching the doctrine of the descent of man from apes, not because he regarded the idea in itself as improbable, but because he wished the distinction to be maintained between the proved fact and the mere hypothesis.

J. P.

AMONG THE BOOKS.

There is now no subject in the educational world which receives more attention than the question of teaching morals in the public schools. The interest in the subject is widespread, and its importance is acknowledged by all. That ethics can be taught in the common schools without sectarianism is daily shown in thousands of schools and by the supply of works on ethics which publishers are furnishing to meet a growing and pressing demand. In the fall of 1889, the American Secular Union offered a prize of one thousand dollars for the best essay or manual adapted to aid teachers to thoroughly instruct children in the purest principles of morality without inculcating religious doctrine. Many essays were submitted, and the prize was equally divided between the writers of two manuscripts. These were N. P. Gilman, editor of the *Literary World*, and E. P. Jackson, master in the Boston Latin school. The title of Mr. Gilman's essay is "The Laws of Daily Conduct," and the book is an earnest attempt to perform the much-needed service of clearing the mind of the common school teacher as to the nature and limits of the moral training which may advisably be given in the school-room. Mr. Gilman aims to help the teachers to a clear understanding of the principles of practical morality, and his treatise is not a text-book or a catechism. He discusses matters of common conduct in a strikingly lucid and forcible manner, and his thoughts, freed from the bias which controls denominational writers on ethics, are just such as will not only benefit the teacher, but bear weight and influence when presented to pupils. Mr. Gilman is master of a style and diction which charms and delights, while it convinces with its force.

The essay furnished by Mr. Jackson is in the form of conversations between a teacher and his pupils, and is entitled "Character Building." It supplies matter systematically arranged and in such a form that the teacher is furnished with a method for presenting the truths intended to be considered. There is in the dialogues a freshness, a crispness, a wholesomeness, that will attract the reader and make the subject matter so interesting that the teacher will be tempted to read Mr. Jackson's "talk" to his pupils rather than try to reproduce them by an easy conversation with his class. The essays are the most valuable and timely contributions to the literature of ethics that have been given to teachers, and should be owned and studied, not only by teachers, but by parents. School officers can place on the desk of every teacher under their jurisdiction no more valuable book than CONDUCT AS A FINE ART. The two essays are published in one volume by Houghton, Mifflin & Co. Price, $1.50.

Dr. A. Hjalmar Edgreer, Professor of Modern Languages in the University of Nebraska, has prepared a brief SPANISH GRAMMAR, with historical introductions and exercises, designed primarily for college classes. A novel feature is the brief sketch of the relation between Latin and Spanish given at the beginning of every chapter. This historical and philological sketch will enable those interested to gain a clearer insight into the derivation of Spanish words. The exercises are brief, but fully illustrative, the rules are reduced to a few, and every essential is given with the fewest possible additions. The book is a model of much in little, and will be found to be a serviceable aid to students of the Spanish language.

EASY DRAWINGS FOR THE GEOGRAPHY CLASS is a little book designed to supplement and make practical the technical drawing book. Even without this, a young pupil will be able to illustrate his geography note-book. Valuable hints on perspective drawing are given in the introduction, and the necessity of bold drawing is strongly urged. Several pages are devoted to drawings, remarks and questions on the vegetable and animal life of the different zones. D. R. Augsbury, E. L. Kellogg & Co., New York and Chicago, publishers.

THE TAXPAYER AND THE TOWNSHIP SYSTEM, and THE TEACHER AS HE SHOULD BE, are two stirring addresses by C. W. Bardeen. By means of familiar illustration and pat quotation, the arguments seem potent to convince, but when all is finished, one knows no more what are the characteristics of that ideal teacher, nor how they are to be acquired than if he had not read the address. The style of both books is loose, and neither will bear analysis. Published by C. W. Bardeen, Syracuse, N. Y.

THE MODALIST, by Edward John Hamilton, D. D., commends itself as a truly scientific text-book. Since the days of Aristotle, philosophers have as often rejected the modal theory as they have reasoned in accordance with it. "The Modalist" embodies the best that has been held and taught for years. Professors and students in our higher institutions of learning will find the book comprehensive and its doctrines in accord with facts. It is also a readable book for the thoughtful, general reader; without taking from the student the dignity of close application in its perusal, it is felt to be something higher than a mere résumé of related facts in the science of thought and of legitimate conclusions. Since "logic" works to the establishment of truth by evidence — and even faith, the highest development of thought, is the "evidence of things not seen" — what study can be more utilitarian, more broadly human? In Chapter I., "Logic Defined," we find reference to the aim of the thinkers of antiquity — "to find some essential principle, the knowledge and observance of which might lead men to true happiness," following which, is a clear concept of the relation of "truth" to intellect. In Chapter VII. on "Predicate Notions," we find an interesting discussion of facts, at once accidental and inseparable, bringing to our mind Taine's ingenious method of showing that the literature of a people is the product of their environment. In illustration, our author says: "It was accidental to Voltaire, considered as a man or as a genius, to be born in France: yet this fact was inseparable from the man." In Chapter IX., "Logical Divisions," this: "Divisions should rest on one fundamentum. . . . The consideration and comparison of different species brings the principle of division into distinct view. Dividing men into Jews, Mohammedans, Christians, and Pagans, we see that man in general is a religious animal, and that this religiousness is something different from any particular form of faith," thus establishing it as a fundamentum. This reasoning exposes the fallacy of all divisions in science not founded on such fundamenta. The book is, from beginning to end, what the author aimed to make it, — "useful instruction enforced by the most thorough explanation." Published by Ginn & Co., Boston.

Prof. C. C. Everett of Harvard College, has prepared a little volume entitled ETHICS FOR YOUNG PEOPLE, in which he simplifies the science of morality and brings its principles within easy comprehension of boys and girls in grammar

schools. It is well that so distinguished a writer and authority has given his attention to the preparation of such a treatise for young people. In the main, teachers have been obliged to rely on books on ethics which have been prepared for pupils in colleges, and have necessarily lectured to their pupils when giving instruction in this subject. But this book can be placed in the hands of the pupils and can be read and studied by them. It is written with just the language and in just the style that befits the subject and attracts the student. There is no "padding," no manufactured stories to illustrate possible cases, but a clear exposition of the science. Teachers will welcome this book, it brings them what they have long desired, and its use in the school-room must make better boys and girls.

Grammars and books on lessons in language multiply, and each new issue marks in some degree and manner an advance over its predecessor. New methods and aids are used by each new compiler, and all become common property. We welcome every new book that has in it something which will make the road to learning more easily travelled. Mr. Horace S. Tarbell, Superintendent of Schools in Providence, R. I., has given the teachers in his LESSONS IN LANGUAGE, a book which combines in a most satisfactory manner the technicalities of grammar with the use of language, and makes each the full complement of the other. Mr. Tarbell has supplied what so many text-books on language have failed to give, some of the essentials of rhetoric, and this addition is a most valuable feature of the book.

When Mr. Dale wrote his impressions of American schools, his fairness and candor won for him a respectful hearing, and his thorough study of the workings of the public school system in this country made his remarks on its condition have a weight which had not hitherto been given to other observers of the system. We have now another student of school systems, Mr. W. Catton Grasby, and he has embodied his observations in a volume under the title of TEACHING IN THREE CONTINENTS: Personal Notes on the Educational Systems of the World. Mr. Grasby makes special mention of the systems in England, Australia, and the United States, with only incidental reference to those of other countries. He came to this country and visited a few schools in some of the larger cities, interviewed a few school superintendents, studied up a few school reports, and writes like a native on our school organization, aim, methods, etc. He is an Australian, and while seeing much to admire in our schools, he cannot but compare them with those in his own country, and in the comparison we suffer. His strictures are mainly against the crudity which necessarily shows in schools in the newer portions of our country, although he finds fault with some of the methods of instruction employed in the cities. He gives a report of a science lesson given by a master in one of the best schools in Boston, and his report is a sad commentary on the teaching ability of the instructor. Our school system strikes Mr. Grasby as an admirable one in the main, but he cavils at the many heads and departments which the system labors under. His report of the condition of the schools in Australia is a most interesting and valuable one, and will give to the reader a better idea of the system of public schools in that country. Mr. Grasby is strikingly impartial, free-spoken, and observant. He believes in public free schools and, in pointing out their defects, is animated solely by a love for the system and a desire for its highest good.

The publications of D. Lothrop Company for this holiday season are fully in keeping with those of former years. In the line of illustrated and fine editions they are unusually attractive. Leading the list may be mentioned the splendid illustrated library edition of "Arabian Nights," in four volumes complete as to text, but especially edited for home reading, and prefaced by a spirited introduction for American readers by the editor, Rev. Dr. Griffis. A sumptuous illustrated volume has been prepared by the eminent New York artist, Wedworth Wadsworth, which he calls, "Leaves from an Artist's Field Book," and which he devotes to pictures and verse, graceful in touch and charmingly descriptive of out-of-door life. "With the Birds," a compilation of the best English and American poems about birds, with beautiful illustrations, and a handsome edition of Celia Thaxter's "Verses," illustrated by well known artists, are also good samples of the popular illustrated books. For young readers, the Lothrop list of the season is specially attractive. It includes the beautiful "Child Classics" compiled by Mary R. Fitch and illustrated by reproductions of the great masters; "Wordsworth for the Young," a unique and charming selection from the writings of this famous poet, made by Mrs. C. M. St. John; "Fairy Lure," a most picturesque and artistic collection of the best fairy tales made by Miss Carrie Norris Horwitz; "The Little Millionaire" a lovely story for boys and girls by Martha L. Moodey and fully illustrated; the "Story of the United States," told for young people by that popular writer on American history, Elbridge S. Brooks; and "The Christmas Book" made up from the Christmas stories and poems of genial Hezekiah Butterworth.

The latest issue in the Riverside Science series, is Prof. J. Howard Gore's GEODESY. Professor Gore has made a most exhaustive study of this science, and having in his possession reports not in duplicate elsewhere, he is enabled to give facts which will prove of great value to those interested in the highest sciences. After relating some of the primitive notions in regard to the earth, its size, form, structure, etc., Professor Gore gives a pretty full account of the first attempts at determining the size of the earth by measurements. The system of triangulating from a known base is historically explained and credit given to those who first made the attempt and finally succeeded. Several chapters are devoted to the progress and present state of geodetic work in foreign countries and in the United States. The bibliography of Geodesy is not large, but Professor Gore's sketch greatly enriches it. Published by Houghton, Mifflin & Co.

WHITE SLAVES is the suggestive title of a book by a Methodist minister of South Boston, Rev. Louis Albert Banks, D. D., which treats of the oppression of the worthy poor. It is not pleasant reading. The seamy side of life in the rich old city of Boston is anything but an agreeable picture. It must be distressing to the well-fed, well-housed, cultured citizens of the city who have prided themselves on their generosity. It upsets one's self-satisfaction to listen to these harrowing revelations of actual suffering right in our midst. But Doctor Banks has done real service by these vivid portrayals of what has come under his own observation. Too much light cannot be turned on the horrible "sweating" system which is getting a deep-seated hold in all our great American cities, and on the cruelties of rapacious landlords, soulless money-lenders,

and storekeepers who drive their young women employes to lives of shame by low wages, and to all those who grind the faces of the deserving poor. The agitation thus started will result in good. Old rookeries will be torn down and intelligent plans will be put in operation for bettering the condition of the poor. We welcome every earnest effort to bring all men into closer fellowship with each other, and to deepen the sense of responsibility for others. This book is well printed by Lee & Shepard, Boston.

"All the world," says Dr. Griffis, "loves a story," and all the world of readers has for an hundred years loved that glittering tiara of stories, linked gem upon gem—the Arabian Nights Entertainments. Though served up frequently in English dress, from the time when the first translation of the Frenchman Gallaud's version of the Arabic was rendered into English in 1724, there had never, up to the present time, been a strictly American version until the Lothrop edition, just issued in four handsome library volumes, appeared with a scholarly yet popular and interesting introduction by Rev. William Elliot Griffis, D.D. While by study, residence and taste Dr. Griffis is a pronounced Orientalist, he takes up the work of introducing the famous Arabian stories as a labor of love and his prefatory pages are full of crisp, attractive, and penetrating material that shows at once the Oriental scholar and the American thinker. The translation he has edited is the text of Dr. Jonathan Scott, Professor of Oriental languages at Oxford, toned down whenever necessary and made perfectly safe for family reading—really the first *complete* edition of the Arabian Nights that has been thus carefully prepared. The volumes are printed from new type, clean, clear and open; paper and binding are of the very best and the fifty illustrations that add picturesqueness to the work are careful specimens of reproduction beautifully printed. The cover of each volume suggests the contents, with its cloth of green—the prophet's own color,—its central arabesque, like a crimson prayer mat of the East, and its interwoven freize that bears the title. Taken altogether no finer edition of the Arabian Nights for popular or library use is known to us, and it is to be welcomed as an American edition of a notable classic dear to the hearts of young and old the world over. There is, also, an especial appropriateness in thus linking, in an American edition of the Arabian Nights, the Occident and the Orient, for it is America that is opening the eyes of the Oriental nations to the modern wonders, more mighty than those told of by Sindbad or revealed to Aladdin, "they are," says Dr. Griffis, "beginning to be curious about the Occidental world of railways, telegraphs, ocean-ambulatory, commerce, the arts and sciences founded on chemistry and mathematics, exploring and missionary expeditions that open Africa and reveal the poles, and picket the globe with pioneers of religion and commerce. They see in all this a world more wonderful than that peopled by the creatures of dreams and other mythical zoölogy of fancy. Upon the lands of the Arabian Nights is breaking that long bright day of human brotherhood, when the West and the East shall see eye to eye in the mutual purpose to exalt humanity in common love and service of the Father, after whom every brotherhood in heaven and on earth is named." Americans should know and possess this splendid edition of the famous Arabian Nights so ably introduced by a practical American scholar.

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY, AND LITERATURE OF EDUCATION.

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THE HIGHER EDUCATION AND CHRISTIANITY.

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THE higher education promotes Christianity. We acknowledge that some minds assent to this proposition with hesitation. God's kingdom is built on faith, it is said. And the higher education, it is also said, is antagonistic to faith. Thought is the mother of doubt; philosophy the parent of atheism. Reasoning fosters agnosticism. The gospel of science is not the gospel of Christianity. And yet, we know that truth must be consistent with itself. The gospel of the rocks, properly interpreted, is one with the gospel of the Bible properly interpreted. Strange, if thought about God should result in a disbelief in the very being of God. Strange, if the more men reason, the less they should know Him who is Light. No, the higher education is a part of the progress of the divine kingdom. The higher education and that kingdom cannot be enemies. The two are one in origin, — God. The two are one in aim, — the incarnation of divinity. The two are one in material to be worked upon, — human character. The two are one in method, — truth in life, and life in truth. The two are one in motive, — divine inspiration. There is an education antagonistic to the progress of God's kingdom, but it is not the higher, it is the lower education. It is the education which is materialistic in philosophy, agnostic in result, narrow in outlook, superficial without breadth,

content to study material without looking through and beyond the material, content to observe law without a suggestion of a law-maker, content to detect design, without reflecting upon the designer. Such education retards the progress of Christianity, but such an education is not the higher; it is the lower. Its members are not members of the School of Athens, nor are they members of the school at Jerusalem.

The particular part of my subject of which I now write, is the method in which the higher education promotes the progress of Christianity.

First. The higher education promotes the progress of Christianity by giving guidance to the forces of this kingdom. The higher education belongs to the intellect. The intellect is the first part of man which it touches. The intellect is the directing force in man. The intellect indicates, measures, values; it analyzes, discriminates, reasons, judges. The intellect is concerned with truth and with truths. The higher education is concerned with truths, and not with truths only but with the truth of truths. The progress of Christianity must be in accordance with the laws which represent the relation of truths. Where can we look for such directing control, except to the best training of the schools? I confess the power of Almighty God; I confess the Divine Inspiring Presence; I confess obedience to the will of divinity; but, I also know that God has committed the progress of his kingdom to human minds and hearts and hands. I remember the command, "Go ye into all the world and preach." Go, with your mind clear and strong. Go, with your heart clean. It is therefore no blasphemy to say, that the mind of man, illumined, disciplined, comprehensive to grasp, keen to distinguish, is to direct the progress of this kingdom. Commerce has gone down into the ocean of the world as a diver, to bring up the precious pearl for its enrichment and adornment. Education has gone down into the same ocean as a rescuer of a drowning man, to lift up and to train a human spirit. Education teaches that a soul has more value than a jewel, as a seed has more possibilities than a diamond. Why did the Christ call Paul to be the great apostle? Why were not Peter, or James, or John thus honored? Paul had a well-trained mind. It is not Peter the Hermit who preaches the Crusades, — Crusades which waste the best blood of the best part of the world for hundreds of years who is called to the highest

place, but it is Luther, who, with keen eye detects, and with mighty robustness urges the great doctrines of faith. It is not John Brown, — bold, true, aggressive, enthusiastic, unguided soul; — but it is Charles Sumner who determines the course of nations. Great movements are created in the atmosphere of intelligence, whether they be created and guided by Abraham Lincoln or George Washington. The men who have controlled the destinies of England in the last hundred years have been men of profound intellectual penetration, large foresight, breadth of vision, accuracy of reasoning. When God wants a great work done, he wants a great man; and a great man is a man great in his power of comprehending truths; great in his power to infer from these truths duties; great in his capacity to be inspired for doing. And where shall God look with hopefulness such men to find? Where, unless among those whose minds are well trained? When God wants foreign missions to be planted, he goes to the colleges. When God wants foreign missions to be carried on, he goes to the colleges. Some men graduate at college who are fools. Some men have the best results of a college training who never saw a college; but the history of all aggressive Christian work proves that the best guidance of it has been by those who were trained in and by the higher education. This is in accordance with the nature of things; with the nature of man. Miracles have ceased. Progress is made under obedience to laws. These laws are in part mental. These laws respect facts. They recognize the verities. These laws are judgment, clearness of vision, power of weighing evidence, allegiance to truth. These laws are the direct and necessary result of the higher education. God does not break laws to save foreign missions. God gives every missionary, every man a brain. Pious fools are as bad as foolish pietists. Practical faith rests on reason as philosophical reason rests on faith. To hope for the highest progress in divine affairs in the world, without the keen discipline of fine education, is like hoping for a swift voyage across the Atlantic with valves broken and piston-rods bent. The better trained the reason and the heart through education, the nearer the reason and the heart approach to that condition in which man was when God breathed into dust the breath of life. The best education is to be taught to think. The best education has as its cause and as its result, to think; and to think makes man like God, fitting him to serve God; to promote his kingdom through wise direction.

Second. Higher education aids the progress of Christianity by giving comprehensiveness to our thought of Christianity. Education broadens. Narrowness of vision, plus ferocity of will, make the bigot. Education puts an end to bigotry through making the vision broad, and through the training of the will. Mental training is the product of wide knowledge, and wide knowledge is the fruit of mental training. If the acquiring of knowledge is a sharp stone to whet the mind into a fitting power, the mind thus disciplined gathers truth's golden harvests. The human mind thus disciplined, broadened, is able to interpret the divine kingdom in its wide relations. This kingdom is no less narrow than the Divine omnipresence. This kingdom is no less profound than the depths of the being of Divinity. This kingdom is no less high than the exaltation of Omnipotence. If beings dwell on planets other than the earth, they in this kingdom have a share. If unseen spiritual existences move about us, they of this kingdom are citizens. The spirits of the redeemed are within its realms, and the souls of the lost are lost far more to themselves than they are to him who is still their father. This kingdom knows no limitations. Upon all that is worthy it lays its sceptre, and says, "This is mine." The ships of commerce are the swift shuttles which weave splendid tapestries for the coming of its king. The laws of trade are its eternal embodiments. The discovery of nature's forces are a new revelation of the agencies which it is to command, and all applications and adjustments of these forces are simply thinking God's thoughts after him. The fundamental principles of the human heart are not foreign to it, for the supreme power of this kingdom is love. Education aids the human mind to attain such conceptions, wide and deep. Education makes the mind as a dome, — lofty, symmetrical, comprehensive, resting on the eternal pillars of the universe. Education makes the mind, as the eagle, to soar, as a lion before peril, as a dove in life's disaster, to bring back the olive branch of promise. Education helps man to be a student, to live in an air of truth, which is at once a breath and a medium of vision; to make every day a microscope for studying the infinite profundity lying in a drop of water or in a grain of sand; and to make every night a telescope for bringing the worlds of great truths near. The best educated man of the Apostles was the apostle of the world.

Such a conception hastens the coming of the divine kingdom.

Such a conception makes the progress of this kingdom coterminous and contemporaneous with the progress of the noblest of present service. Such a conception at once brings the divine kingdom down to the earth, and lifts up the earth to the divine kingdom. Such a conception makes the stars sing praises to their maker and king, and it opens the ears of mortals to hear their songs. Such a conception makes the secular sacred without making the sacred secular. Such a conception causes every existence to bear relation to every other. The pebble which a child's hand lifts, changes the center of gravity of the universe. Every act comes to be embraced within the all-embracing divine rule.

Third. Education promotes the progress of Christianity by giving a richness to our thought of this kingdom. If the King of this kingdom was born in a manger, the throne of this King is of pure gold, the walls of his city are built of precious stones, the gates of these walls are pearls; if the rallying-cry of the progress of this kingdom is self-sacrifice, this self-sacrifice is such an emptying of self that self may become not an emptiness, but rather an embodying of all. The self-sacrifice of Christianity is the self-sacrifice of the lover, who loses self and gains what he thinks is worth far more than self. The higher education calls every noble power into the service and rule of this divine kingdom. It demands, and it receives, the noblest contributions for the progress of this kingdom. It despises the showy and the meretricious. It condemns the tinsel. It glories in the true, the good, the beautiful. It gives its truth for the enlightenment of earth's dark places; it bestows its goodness for the betterment of man; it discloses its beauty for the adornment of the beautiful. It is indeed true that in dungeons of darkness and helpless misery, have human souls met their God, and there found the presence and the comfort of their God blessed. It is true that in purity of heart and not in the clearness of intellectual comprehension lies the divine vision. It is true that the pathway from earth to heaven may lie outside cathedral aisles and outside of college walks, but it is also true that the larger, the richer thought of humanity, in which comes the kingdom of God, has for one of its instructive and constructive forces the noble training of the mind. This training gave to the eye of man the power to see in void space the cathedral, and gave to the arm of man the power to lift flying buttress and groined roof. This training gave to the mind

the power to conceive, to the heart the power to feel, and to the lip the power to sing the Christian hymn and the oratorio which are as the preludes to angels' songs. This training gave to the painter the skill to present on unfading canvas the infinite love of God in the face of the mother of Jesus, and also the infinite strength of man in the face of Jesus Christ her son. Take from human thought and human life the works of noble men inspired by rich and noble purposes, and the divine kingdom still is, but it is, compared to its present state, as the bare cabin of the savage is to the sweet Christian home. Take from human thought and life the works of noble men, inspired by such noble purposes, and the divine kingdom still moves, but compared to its present rate of large and swift and magnificent progress, it moves as the caravan moves across the desert. As for hundreds of years, the best thought of Europe was built into the stones in the Gothic cathedral, and as the Gothic cathedral gave beauty and glory to any stone composing it, so the higher education is now giving nobility of character without coldness, and a beauty of spirit free from selfishness, and a richness of life devoid of luxuriousness. Thus the higher education promotes the progress of Christianity in the hearts and the haunts of man.

THE SUPPORT OF THE SECONDARY AND HIGHER EDUCATION BY THE STATE.

BY REV. A. D. MAYO.

I.

ONE principle upon which all human governments have been united since the dawn of history is, that the state has the right to train a superior class of its citizens for the higher affairs of life, at public expense. With many differences of opinion concerning the make-up of this superior class, the service they should render and the sort of education necessary for their outfit, there has been no question about the necessity of the duty itself. Indeed, every nation upon earth, to-day, save the United States, not only educates the soldier, the priest, and the statesman, but largely supports these classes at public cost. The most ancient priesthoods and nobilities were a body of men who lived upon the

state. The great national universities of Europe; the state churches; the privileges accorded to orders of nobility, are all the European methods of training a superior class for the public service, at the public expense. It matters not whether this superior class is wholly or in part schooled and supported by the nation, since, in every case, the nation gives all the training it regards essential for the proposed end.

The only question between the nations in this right and duty to educate has not been concerning the superior class but concerning the whole people. Until within the last three centuries, no government supposed it necessary or just to open the gate of knowledge to all its subjects. The idea of what we call universal education — i. e., the instruction of the whole people in elementary knowledge at public expense; and the offer of the secondary and the higher education to all who have the ability and the persistence to take it, was regarded by civilized Europe, three centuries ago, as a delusion conceived in heresy and brought forth in rebellion. Only by the most gradual changes, and often through the most bitter conflicts of public sentiment, has this faith in even the elementary education of the whole people made its way in Christendom. Thirty years ago, in the south of England, I read the account of a meeting of farmers who voted it inexpedient to educate their laborers beyond the ability to read the Bible. A most accomplished English lady, the wife of a dissenting minister, said to me: — "If we teach our servant girls to read, we shall find them hanging over the speeches of John Bright." First of all the peoples of Christendom, the Scotch and the Puritans, two hundred and fifty years ago, conceived the plan of giving education to all the subjects of the state. The New England colonies did not drop one good thing to take up another when they established a common school. They first established Harvard College, then the secondary schools that should fit superior boys for it; and only gradually opened the door of the temple of knowledge wide enough to let all men and women come in. And, to-day, the American system of education differs from the European nations, chiefly, in the more generous and thorough support of the lower schools which give the elements of learning and discipline to every child.

So, when we are gravely told, as we are, by high authorities, that our present American system of public education has out-

grown the intention of its founders by adding the superior school, we reply: it *has* outgrown the system of the fathers, but by adding the common to the secondary and higher education. Until 1819, Boston supported no free primary school. Till 1834 the state of William Penn and Benjamin Franklin, now the second in the Union, had no system of common schools. President Hayes said to me twelve years ago: "It would be far easier and safer for you to go through every Southern state, to-day, preaching an evangel of the free schools, than it was for Thaddeus Stevens, fifty years ago, to do the same thing in Pennsylvania."

The State of New York burdened its common schools with a rate bill until thirty-five years ago. South Carolina had absolutely no free school system for the people before the War of the Rebellion. But every American colony, before the Revolution, and every state, from the first, in some way, gave its support to the higher education. When, where, and how, and to what extent this should be done, was a question of expediency; but the one principle on which all divisions of this union agreed with all peoples of the earth, was the right to train up a class of superior citizens, at public expense, for the service of the state.

The theory that our present American system of the public support of the secondary and higher education is a fungus on the original trunk of our free elementary school, is disposed of by the most hasty glance at the actual practice of the American people, from the earliest colonial days. Massachusetts is the great mother of American schools; and Massachusetts began to build not at the bottom, but at the top. In 1636, six years after the settlement of Boston, when the entire population of Massachusetts Bay colony did not exceed 5,000 persons, scattered through a dozen backwoods villages, the General Court appropriated £400, a sum greater than the taxes levied for all other purposes in a single year, to establish Harvard College. No such grant, proportionately, was probably ever made in the world for the establishment of superior education by any state. For two hundred and fifty years old and new Massachusetts has stuck to Harvard University, bestowing gifts of every sort, a list of which would amount to more than half a million dollars. Without the State of Massachusetts, Harvard College would either have not existed at all, or would to-day be numbered among the inferior institutions of the land.

At nearly the same time, 1647, the Colony of Massachusetts Bay supplemented this munificent effort by compelling every town of one hundred families to support a public grammar school, which might be free, at the option of the people, to fit boys for Harvard University. The Colony of Connecticut followed this good example and, as early as 1650, reënacted the system of her elder sister, Massachusetts. In 1701 it was provided that a grammar school should be established in each of the four chief county towns, and that the General Court should make an appropriation of £120 per year to Yale College.

Beyond New England there was no system of common schools previous to the War of the Revolution; but several of the colonies made provision for a university. *Nearly all the public support outside of the New England colonies, to education before the Revolution, was for superior education.*

At the earliest date after the establishment of the Union, the New England States and New York began the establishment of the school funds which have now reached the sum of several millions in several of the states. These funds were founded by the sale of public lands and increased by the distribution of the United States Deposit Fund, and have always been used for the secondary as well as the elementary instruction of children and youth. The normal schools and board of education of Massachusetts to-day, are largely supported by the sale of public lands in the Boston Back Bay.

The State of Massachusetts has never swerved from her policy of fostering the secondary and higher education by public grants. Williams and Amherst Colleges; the Technical schools of Boston and Worcester; institutions for the education of the deaf and dumb, the blind, and the idiotic; public libraries, museums, schools of art, have been generally subsidized; the policy being to give the institution a vigorous lift to its feet and hold it there till private beneficence could be trusted to keep it upright. As early as 1797 the State of Massachusetts included the academies, already incorporated, in her system of public instruction, and provided for their support by grants of land in the province of Maine. A settled policy was established, to endow one academy of the secondary education for every 25,000 people in the state, then including Maine; and this policy continued in force till the establishment of the present free high school system in 1826, although the

new system did not become a success till 1834. The present system of free high schools in Massachusetts, which is being copied in every American state, was confirmed as a vital part of her educational policy by the great movement in which the central figure was Horace Mann.

This early policy of the public support of all education by the New England colonies was, doubtless, the inspiration of the early legislation for the education of the people by the government of the United States. In the old Congress of the Confederation, in 1785, a committee of twelve, representing all the colonies, framed that immortal ordinance, second only in importance to the Declaration of Independence, whereby every new state should receive an endowment of public lands for public schools, amounting to one-sixteenth of every township. The ordinance of 1787 confirmed this provision and added the significant clause, that two complete townships should be given to each new state for the purpose of a university. Under this provision, every new state admitted to the Union, during the first half of the present century, received in this proportion for education of all grades. In 1848, on the admission of Oregon, this bounty was increased by the addition of another section,— now 16 and 36 — in each township. Under this mighty benefaction during the past one hundred years, more than 80,000,000 acres of land, — a tract twice as large as the State of Ohio — worth at government prices, $100,000,000; but with a present unestimated value; has been donated to twenty-eight states of the republic. In 1862 the Congress of the United States paused amid the din of opening war to give to all the States another grant of public lands for the establishment of a College of Agriculture and Mechanics, and, in 1890, added to this grant.

No part of the history of the United States is more melancholy than the record of the wreck of these splendid educational endowments in several of the states of the South, or the plunder or waste of these munificent domains in others of the new territories of the West. But many of the states have used their great opportunity. Under this grant every western state has now a flourishing state university, supported in considerable part by the income of its public school lands; and in several, the State Normal School and Agricultural College are also doing a valuable work. There can be no doubt that the state of Ohio owes its remarkable preëminence, as a nursery of able public men, to-day,

largely, to this early provision for the support of public education. Her two little frontier universities, Oxford and Athens, established with the income of her public school lands, have graduated a host of men whose names are of national renown. The university of Michigan will give to that great commonwealth a similar preëminence. Every state university and normal school established by the grant of government lands now opens its doors to women, and the whole drift of the higher education beyond the Alleghanies is towards the exaltation of the instruction supported at public expense, free to all, and open to boys and girls. If the old Commonwealth of Massachusetts takes counsel of some of her eminent advisers, to-day; closes down on the public support of even the secondary and repudiates all connection with the higher education, and slams the doors of her colleges, largely established by the bounty of the state, in the face of her young women, it is easy enough to see where she will be, half a century hence, in the Congress of the United States, and in commanding influence in national affairs, before these mighty states of the West which are building for every child an open highway to the loftiest manhood and womanhood the new republic demands.

But this does not exhaust the record of the general government in dealing with the higher education of the people. Outside this donation of public lands, such a gift as no government ever yet made for such an object, the Congress of the United States has always been open to appeals for the higher culture. It has established a great library at Washington; supports a military and naval school; an observatory and public museum; educates the Indians; appropriates money for national and international expositions of industry, including education; now supports a bureau of education for the collection of statistics; has spent largely for the education of the freedmen, and has considered a bill to appropriate the income of the public lands, with other funds, to all states for education; the distribution for the first ten years to be on the basis of illiteracy. Although distributed in a somewhat fitful way and with a somewhat unstable policy, the government of the United States has probably given more, in actual money value, for education than any government on earth, in the past one hundred years; and the gift has not been limited to the elementary, but has always included the secondary and higher ducation. The assertion that the support of education above the

elementary grades is a new departure and a violation of the ancient American precedent, is wildly incorrect. Never for an instant has the United States or any state of the Union swerved from the common practice of all human governments; to lend the powerful aid of the state to the superior training of a superior class who shall lead the people. The only departure from the universal custom by us has been the carrying out this universal principle to its logical result — opening the door wide to every citizen and inviting all to the feast of knowledge spread on the great upper plateau of human life.

By steps perfectly logical and reasonable has the original plan of the colonies, the states and the nation in the early period advanced to the present American system of absolutely free secondary education for the youth of both sexes, in every community willing to assume the burden. In Massachusetts, to-day, ninety-one per cent. of the people live in communities supporting free secondary or high schools. Nearly every state permits any community to establish such a school at public expense. Nearly all the states support a free university of some form and a normal school for the training of teachers.

It is easy to see how we have come up to this point. In the European states, in the past centuries the higher education was practically administered by the church as the representative of the nation of whose government it was a part. Only the favored classes were invited or encouraged to reach up to this higher education, and they were enabled to bear its expense of time and money by public bestowal of rank and property which lifted them above the common herd. But this republic cut loose from the church and orders of nobility at its beginning, and the sovereign people itself takes their place as the instructor with the public schoolmaster, minister and professor in the place of the priest and teaching orders. Hence the impropriety of subsidizing sectarian colleges or private corporate schools with public money. However valuable may be a private or corporate school, it can only be relied on to give the sort of education and training which seems best to its board of management. However necessary, in our present order of society, may be academical, collegiate, or professional schools administered in the interests of ecclesiastical and denominational religion, as understood by the various sects, no church can be trusted to educate citizens for this republic. Hence the drift of policy, in all states of this Union, is to withold its

subsidies from all institutions of learning, elementary, secondary, and superior, save those which are entirely subject to public administration. This is what our Catholic Bishops and some Protestant clergymen call the "American system of Godless education." But the American people, of every sort, are rapidly coming to the conclusion that about the most godly thing that can be done on this continent, in this age of the world, is to educate 65,000,000 of free people in the elements of good learning and the mental and moral discipline which will make them good citizens of the United States, and place before the hand of every child a gate of pearl, "on golden hinges turning," opening upon the illimitable realm of the whole higher estate of mankind.

Equally reasonable has been the advance from the partial to the complete freedom of the secondary and even the higher education. It was a great step forward when the American people opened its superior schools of all sorts to the youth of every class, and by endowments, public, and private, endeavored to bring them in reach of the poorest child. But, even then, a generation ago, the path to the superior education was one that, however it may shine in the glorified pages of the poet or the fond remembrance of the scholar who came out unscathed, was a path of thorns. There has never been a system of higher education so destructive to life as that of New England fifty years ago, when the boys from the farm and the shop worked their way through college by the labor of their hands. I entered a country college in Massachusetts, at the age of twenty, with a class of thirty young men. Two-thirds of us had no available means to pay even the small expense of this slender course, and had worked our way up to college doors by toils which sorely tried our stamina of body and mind. Before the end of the term of four years, half of those thirty young men had fallen by the way; several of the brightest died or were permanently disabled. I fought death and debility for twenty years, and only, at forty, stood firm on my feet. That college class was a type of the perils of the higher education as faced by the poor young man of that period. Whether the "fittest survived" in that fearful war, I am not prepared to say. But when I hear eminent men who did pull through and live, and noble women who had no chance at all, forty years ago, declaiming against our free high schools and state universities as a premium on youthful laziness, I feel inclined to remind them that the boy or girl who, to-day, undertakes, in earnest, to walk the

path of the higher education, carries a burden on soul and muscle in the work itself which forbids the imposing a weight of another sort. To say that only the American youth who can afford to pay for it shall have the superior education, is to propose the lowest test of merit, the possession of money obtained in any way by his parents or friends. To say that the state should only interfere to aid the youth in the last extreme of poverty, is to compel thousands of our finest American children to go through the most sensitive years of their opening life with the tag — "poor scholar" — sewed upon their skirts. To assert that all whom the country needs in the higher walks of scholarship will thus find their way there, is to ignore the teaching of the past. Every child that loves good learning and craves the noblest distinction of a cultivated mind and character, will doubtless attain somewhere and sometime; but whether that victory shall be won on this or the other side of the "valley of the shadow of death" depends largely on whether the sovereign people casts its mighty electric arm about the little one, saying: — "Go up, my child, and serve the state by becoming wise, strong, and righteous in the highest American way."

Of course the when and how and wherewithal in this matter of the free higher and secondary education is an affair of high, social, and political expediency. A people may be taxed too heavily for even the noblest public uses. The higher education may be made so superficial, so low, such a sham, that it is good for nobody. Private beneficence may come in and, sometimes, wisely, relieve the burdens of the state. The American people are famous for their knack of finding out a practical way of doing every good thing. They take small stock in wholesale theories of education and politics. *They intend to open every door of knowledge, character, and opportunity to every American child.* If others will open the door, all well. But while the church cavils and private beneficence lags and the child "grows like a weed" and the rusty hinges of opportunity still creak, the sovereign people puts forth its hand and swings wide open the great front door of the schoolhouse and points the way up stairs to the top of the dome for a glance over the outstretched domain of American life. The sovereign American people will have its own way with our boys and girls, and it is not good to waste precious time, in days like these, trying to pile up little barriers in the path of American youth, whose shoulders are to bend with the mighty burdens of our coming years.

good

REAL AND SHAM OBSERVATION BY PUPILS.

HENRY L. CLAPP, MASTER GEORGE PUTNAM SCHOOL, BOSTON.

IT is well known that children from their earliest years, manifest their most important mental and physical powers spontaneously. They walk, talk, look at things, handle things, think and imitate from a natural, internal impulse. With proper opportunities, they learn fast and well without formal instruction.

At first sight it seems unaccountable that this natural condition should be so often overlooked in the schooling of children. Looking farther we shall find the cause of this oversight in the traditional literary methods that have prevailed from ancient days. Long training in the symbols of knowledge only has proved a disqualification in the acquisition of knowledge at first hand. Here I find the most serious obstacle to nature study in the primary schools.

There is no lack of material in the form of leaves, seeds, fruits, vegetables, stones, shells, insects, etc., but there is a lack of understanding as to how they are to be used in *educating* children, not simply *informing* them. The observation lesson is confounded with, or made the occasion for, an information lesson, or a language lesson; and there, too frequently, the work ends.

To illustrate. We will say the lesson is on the maple leaf, and every pupil has a leaf. The teacher, holding up her leaf, says, "Tell me something about this leaf." Pupil: "There are five points on it." Teacher: "Who will make a good statement, beginning with 'This leaf?'" Pupil: "This leaf has five points." The teacher writes the sentence on the blackboard, and then says, "Tell me something else about this leaf." Pupil: "It has a stem." Teacher: "Petiole is a good name for the stem. Who will make a good statement, using the word *petiole?*" Pupil: "The leaf has a petiole."

So the lesson proceeds to some length, and a variety of thoughts and expressions are said to be drawn from the pupils, and sentences corresponding are written on the blackboard by the teacher.

Then the children are told to write out what they have discovered. The results, to a casual observer, are often wonderfully uniform and excellent.

Consider what really has been done. A few of the most intelligent and responsive pupils have become the proxies of the other pupils, have made the investigations and the expressions corresponding to those investigations, and have poured out information for the appropriation of the many pupils always on the watch for labor-saving devices. Thus, the old "pouring-in process" has been transferred from the teacher to the more responsive pupils with no advantage except to those responsive pupils. This is a very deceptive phase of the work. It is unfortunate that so many teachers are deceived by it, all the time thinking they are teaching admirably. They do not perceive that they are allowing their pupils to form the habit of catching expressions and avoiding dependence on their own senses. The pupils' written descriptions may appear highly commendable; but they are largely memorized statements made by a few pupils, and the benefits that might have been conferred upon all the pupils, by a series of investigations undertaken by themselves, have been lost.

In regard to teaching reading in the primary schools, Mr. Davis, superintendent of Chelsea schools, says: "There must be no memorizing of sentences given by the teacher at any stage." The opportunity presented for the memorizing of sentences or others' thoughts in nature study is still more out of place.

In the study of nature the habit of investigating must be formed. In the case of primary children the work of investigating must not be heavily saddled with language. The letter killeth the spirit. A language lesson may be given on the observation lesson with the greatest advantage, but at another time.

The pupil must examine his own specimens, and express in his own words, as far as possible, what he has discovered by his own senses. From his own object he will get the best description *for him.* It may not be as good as some other; but it will be *sui generis*, of its own kind, and show what the object has to reveal to him. Mr. Bowen, an English writer, says: "The best description of a thing is the thing itself — then a concrete model of it — then a picture — and last of all (certainly the last with young children), a statement in words." Allow the pupil to rely on his own powers; otherwise he will resemble one who learns to play

the piano by ear and not by note. He will never go far. The boy who sticks to his notes will become a proficient player, and the boy who relies on his own senses will become an accurate observer, and in due time a learned man.

The teacher's part is to furnish proper opportunities and guidance when necessary. The preponderance of work must always be on the side of investigation and not on the side of language.

CLAIMS FOR ENGLISH AS A STUDY.

PRINCIPAL TRUE W. WHITE, ANDOVER, N. H.

WHEN Charles Francis Adams, in his address at Harvard College a few years ago, made his famous attack on the excessive attention given to Latin and Greek, it was as a signal-gun for a long and bitter war between the two great forms of scholarship, — classical and scientific. Classical scholarship, with its twenty centuries of prestige as the foundation of all learning, and its hundreds of professors whose lives had been devoted to it and whose employment, in many cases, depended on its continuance in public esteem, did not lack in able defenders; while the American spirit of the nineteenth century, with its insatiable desire for physical luxuries and conveniences, demanded that more attention be given to studies leading to so-called *practical* results. After a half-dozen years the smoke of battle has mostly cleared away and neither side has lost much ground. It is as firmly established as ever that the study of the languages (the Latin and Greek languages assumed) affords a certain mental discipline and culture nowhere else to be found; but it is an equally accepted fact that the sciences pave the way to material advancement and are closely connected with "common-sense." The truth is, neither is sufficient of itself to furnish a complete and liberal training. As long as a college student can be found who, knowing that the Greek particles μὲν — δὲ are often translated, "on the one hand — on the other hand," seriously renders a passage from a Greek author, — "we see his own nose on the one hand and his eyes on the other hand," so long has Mr. Adams a right to accuse Greek culture of not building up a perfect human understanding. But when one of our great inventors can see no good in a grand drama or a

beautiful poem, then the Greek professors may justly pity the darkness of his soul notwithstanding the light shed by his 70,000 candle-power electric lamp.

This long controversy has not settled the question between classical and scientific studies. But it has effected an important result in leading people to consider a little more carefully what it is in any study that is of most value. This is especially noticeable in the matter of English. Various forms of language study are coming to be rated at new values. Old ideas of parsing and sentence analysis are going out of date. The very names of our text-books are different. Instead of the old "English grammar" and "Parsing-book" we now have "Exercises in sentence-building," or "Lessons in English." It is said that English has no grammar, and the best way to learn composition is by practice and by reading standard authors. Now, while these changes are undoubtedly doing a much-needed work in removing some of the hateful formality that has encumbered the study of English, I believe that this, like many another reform, has gone too far. Because English has been studied wrongly many seem to have concluded that it need not be studied at all. Many others in attempting to make it easy and pleasant, have done away with much that is essential and most valuable. If there is even a little ground for this fear, it will be useful to consider some of the reasons why the English language deserves more careful study than it now receives.

The object of study has usually been considered as two-fold, — for practical use and for mental discipline. In the light of recent thought there may be added a third, viz.: To give an elevated form of pleasure. How can the English language be made to fulfill each of these purposes?

It is evident that language is the first sign of civilized life. Man has been called a speaking animal. Without the means of communicating with his fellows, even if endowed with reason, he could have no thoughts but his own, and advance in knowledge would be impossible. Every business transaction is achieved through language. The art of numbers is the only thing to be compared with it in practical value, and even the ideas of numbers are expressed by words. It is not enough that we should be able to express our thoughts in a general way. I believe that what is worth knowing at all is worth knowing well. Many a

merchant has failed, many a suit for scandal has been brought, many an important order has been disobeyed, because some one did not speak, write, or understand words correctly. It is a matter of personal safety for every one who has dealings with his fellows that he use and understand language so accurately that if there be a mistake it shall not rest with him. Again, language is necessary for accurate thinking. It is said that words are only the signs of ideas, — Merely the counters of thoughts. The converse is almost equally true, — that perfectly distinct ideas must be embodied in words. Richard Grant White was not altogether theoretical when he declared, "We think in words, and he who lacks fit words lacks fit thoughts." Certain it is that confused and indistinct ideas are often made clear and distinct to ourselves by expressing them in words for another. The rough, old college president in Canada was not entirely unreasonable. He was hearing a rather dull recitation in mental philosophy, and one of the students, in answer to a question, after some hesitation, stammered that he knew but could not express it. "Do you know?" demanded the old professor. The question is pertinent. Do you KNOW anything that you cannot express? I think not in any exact and practical way. I believe that one reason why the knowledge obtained from the mathematics is so exact and reliable may come from the fact that each word used in the discussion of that subject stands for some one clear and definite idea, and each idea has some word to exactly express it; and a reason why the mental and metaphysical sciences are so unsatisfactory and contradictory may be that single words are used with different and indistinct meanings. And the same half-understood meaning is expressed by different writers in different words. Thus, in whatever we may be engaged from the simplest every-day matter to the most abstruse philosophical problem, it is language, the English language, upon which we must place absolute dependence. What other study, then, is to be compared with it in point of practical utility?

Secondly. Studies are to be considered with reference to mental discipline. The disciplinary value of certain languages needs no vindication. It is an unquestioned fact that the greatest scholars and thinkers for two thousand years have been, almost without exception, close students of the classic languages. The best students in almost any of our higher schools are known to be

those who take classical rather than English courses. Hence it is concluded that Latin and Greek are better adapted to train the intellect than any other studies. We cannot deny the fact, but I do deny the inference. To become proficient in these subjects requires, for the average youth, greater application than any other subject in our schools. Through this application the boy becomes accustomed to hard work, so that when he meets a difficulty in another subject he is not afraid to get right down and attack it with no idea of giving up until he has conquered. I have no desire to oppose the classics. The long hours given to the Greek Grammar and lexicon can never be regretted. But I challenge any man to reflect carefully and then answer the question: — If the same application and honest labor had been given to tracing out the derivations and exact meanings of English words, and if the study given to Latin and Greek authors had been spent in equally long and conscientious attempts to understand English and American classics, would not the student's mind have been equally well strengthened and disciplined, as well as being stored with practical knowledge instead of that which, for the most part, has no use outside of the study or examination room? This, I believe, to be the great reason why English is not to-day esteemed by our own people as a language for scholars equally with Latin, Greek, and German: because, unconsciously assuming that we know our own language perfectly, we give it no attention, or, if we do take it up for a little, we merely glide over the subject in a superficial manner without appreciating the depth of possible meaning. There is not nor has been any nobler language on earth than ours. If the Greek has fine shades that we cannot express, we have quite as many that the Greek could not even understand. If the German has long compound words and sentences requiring the closest thought to detect their relations, the English is hardly behind. No man need flatter himself that he knows the English language and can find nothing worthy even of the acutest intellect.

Grammatical and logical investigations lead us insensibly to the third grand end, — intellectual pleasure. Every intelligent person has spent many of his happiest hours reading some good book. My plea is that our language be so understood that the finer elements of style will not be unappreciated, but that the reader will delight in pausing here and there to reflect on happy expressions

and delicate shades of meaning, and thus add many percent to his pleasure in the work. When this is done there surely will be no occasion to go to any foreign language for poems, novels, or philosophical works. Our language has the most magnificent collection of masterpieces in every department of literature that has ever been produced. Even when some foreign work is found superior to anything of its kind of English or American birth, it can always be obtained in a good translation, and so little is lost by the change, that Ralph Waldo Emerson declared he "Would as soon think of swimming across the Charles river instead of going over the bridge, as to read any book in a foreign language if he could get a good English translation." As long as our Shakespeare, Brownings, and Longfellow; our Dickens, Eliot, and Hawthorne; our Gibbon, Macaulay, and Bancroft; our De Quincy, Carlyle, and Emerson, with hundreds of other writers who have expressed every good and beautiful thought the world has ever known, in language unsurpassed in grandeur and beauty, all are inviting us to delight in their pages, why do we spend years of our short lives trying to get an unsatisfactory knowledge of other languages?

Now, if, as I have tried very briefly to show, this one subject admirably supplies the three objects of study, furnishing at once most practical and useful knowledge, excellent mental discipline, and highest pleasure, why is it neglected in our schools to make more room for subjects that have, at most, not more than one such value?

This is not fighting a windmill. The subject has recently been much agitated; each year English receives more prominence in courses of study in schools and colleges; but much more remains to be done. Go into our schools and see how many pupils are unable to write an ordinarily grammatical sentence; go into our colleges and see how many students cannot make a respectable speech at a dinner-party; pick up your newspaper and see how many news reports are ambiguous in meaning; go amongst the people and see how many there are who can tell you no difference between the poetry of Chaucer and Alexander Pope, or between Bryant and Walt. Whitman; then consider whether English receives all the attention it deserves.

One more thought remains to be added. Much is now being said about teaching patriotism. Dr. Hale has recently suggested

the establishing of a university professorship to emphasize the difference between the United States and other countries. But no history or other means can represent the character and development of a people more accurately and vividly than the growth of its language and literature. As the student becomes familiar with our language and sees how, for more than a thousand years, it has been growing out of the mixed elements that composed it in the beginning; as he notes the simplicity of the early Celtic phrases; the sturdy strength of the old Anglo-Saxon words; the dash and spirit of the warlike Normans; the advantage taken so freely of whatever was most valuable in the Latin, Greek, and modern French; as he traces the marvellous development of our literature, and as he reflects that all this is the indication of the life of a mighty people, — he can not fail to be thrilled with an increased pride that he, too, is a part of this great life. The magnificent eulogies upon our nation pronounced by Webster and Clay, gain something in significance when we think of them not only as honoring our nation, but as expressed in *our* language. Our cheeks burn as we sing, "My Country 'tis of Thee, Sweet Land of Liberty"; but the pride is hardly more in the sentiment than in the pure and simple power of its expression. So, in all our speaking and reading, we may profitably remember that this language is not the least of the inheritances that we, as Americans, have received from the generations that have gone before.

WHY TEACHERS SHOULD GO BEYOND TEXT-BOOKS.

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THE first consideration why we teachers, notably of geography, history and science should go beyond text-books is a kind of Aaron's serpent that swallows up the rest, for it is the argument of necessity. We must obey an imperative public sentiment, and teachers who do not, will find themselves — to use a telling Americanism — "left." The demand comes with the authority of the previous question that cuts off debate. But the requirement is willing to make itself intelligent — let us consider more specific reasons.

1. We go beyond text-books, *for the effect upon ourselves.* It is our natural, our only escape from that benumbing and belittling of elementary samenesses which has long hindered the advancement of our vocation to the dignity of an acknowledged profession. As a calling it is old, — as a profession it is new.

Whenever the character of teacher appears, or rather, has hitherto appeared in the books, — and the pedagogue in novel and drama is as frequent as the fond parent, the spendthrift, or the villain, — it has been often amiable and praiseworthy, disinterested to the degree of unthriftiness, sometimes a scholar, but often a sham and an ignoramus, awkward and eccentric, seldom influential or worldlywise, as a rule undignified and inferior. Take Thackeray's characters, — those who taught Becky Sharp, Georgy Osborne and Pendennis.

Dickens' softest side toward teachers is ridicule — he seems almost malignant and darkly hateful as he draws Squeers, and Bradley Headstone.

Scott's school teachers are better men, but hardly more respectable. Poor Mr. Patterson stormed with the hum and suffocated with the closeness of the school-room — hearing the same Virgil, with no variation but varying stupidity in pupils.

Jane Eyre goes out of her way, and as far from fact, to abuse a really kindly kept school at Lowood, justified, let us hope, in her own mind, by the evils of the system elsewhere, and at large.

Bulwer's Eugene Aram, is the only teacher we recall in the literature of the past generation whose abilities and learning afford any concession toward respect — and he a murderer; and Ichabod Crane heads a long American list.

All this has changed, of course, in our day. Not merely the college dons, but the teachers at large are respectable. Other professions may outrank us in age, and as yet in estimation, but no other just now is rising so fast. People are less inclined to go to law, if not to lawyers; they take less medicine, if not physicians; and there is a growing confidence in the possible saving and regenerative power for this world at least, in schools and teachers, as well as in ministers and churches.

Teachers' goods most of all, find now, if not high prices, at least a rising market. There is, moreover, a peculiar good fortune here that we may find that which is both congenial and improving, lying directly in the line of our business and duty. Not for

us purposely, but none the less for our sakes, was made up that matchless library which constitutes a modern geography, of the dash and daring of explorers and adventurers, dignified, moreover, by the deepest devotion to some purpose of humanity or philanthropy, and Stanley, Greeley and De Long are only a few of the instances. Of observers like Darwin, and perhaps Thoreau, who saw with an insight as distinct as the poetic gift, verifying each fact with the authority of science, or at least of liberal learning, or of Burroughs with lively painstaking, revealing by dint of closer companionship a new interest and significance to everyday nature, or again, those sprightly social studies of the foreign life of the ubiquitous Anglo-Saxon, presented like stereoscopic views, but earnest, sensible and practical as in Lady Brassey's "Trades, Tropics and among the Roaring Forties," or Froude's "Voyage in British West Indies," or "Trout fishing in Norway Fiords." In collating these riches there is a private thesauros for ourselves, as well as "lots of loose change" to be thrown among scrambling pupils. And we need to know everything to make one thing plain. The needed impression and proof of power in the minds of our pupils in us comes from power held in reserve like a background, without which, there cannot be a picture. That study and research which only does justice alike to ourselves and our classes, would go far to make us each a specialist in some particular line, that, followed up, would lead along the ways towards fame and fortune.

2. Another consideration for supplementing the text-book with standard and current literature, is the *aid thereby afforded to creating and impressing moral influence and sentiment.* We may naturally regret that those who are to live and act together should not all be educated in the public school together, but we must recognize this idea of parochial schools, that something else must be provided during the long years of childhood than mere mental training, however complete, something more than text-book knowledge or technical knowledge of whatever sort. I can praise instruction that exacts deference and induces habits of reverence and promotes it as a principle or sentiment in any form. For deference and reverence seem to be fading into abstractions and disappearing from the dictionary of our common life, and without these for a foundation, how shall we build up the American boy into a gentleman?

The general truth is now more pertinent than ever that notions, sentiments of delicacy, taste, purity, honor, reverence, patriotism, self-sacrifice, refinement in manners, nobility in character, must be given and gained in schools if ever, and in most instances, in school life — gained by observation of living examples first (may we be found sufficient), and by study of recorded instances set forth in simple and elevated expression. Standard text-books can give little help, but literature abounds in what we need. Does this reliance and count of mine seem far-fetched? Augustus Cæsar employed Virgil to compose farm ballads to change and shape national thought — and history does not show such another accomplished worldling — so consummate a master of measure and men. Let those who lack faith in these still-working, leavening influences, exercise charity when they confess how inoportune and inefficient are present means. Who says, and how much, for a better?

Of making text-books there is no end, and if there is not needed another on plain manners and every-day ethics, it is because we may find better teaching outside all text-books. We cannot teach character in set lessons, nor patriotism by marks and prizes, let us not, if we can help it, turn out upon society mere text-book experts with manners of taught barbarians or their lack of tact and manners will defraud them of deserved success.

3. If we give third place to the consideration of going beyond text-books for direct aid and advantage to the pupil himself in the very line of his study by vivifying the facts within his lesson with incidents and associations from without, it is because a case so evident is not strengthened by painstaking proof.

Putting it algebraically :—

A name — an incident = a sound. A name + an incident = a fact: yes, two or more of them.

The average boy will not be deeply stirred in spirit over the mere name of some unknown river, say, McKenzie, where it runs and where it empties. Neither will he throw his cap on high in ecstacy over the more modern improvements — and such they are — water sheds," and "divides," and "primary and secondary systems." But grace will be given him to endure sombre statistics, if you tell him how just one hundred years ago Alexander McKenzie, with the grit of Scotch granite, reached the mouth of the river that bears his name, and, seated in his dog sled, watched

the white dolphins gamboling in the Arctic deeps — how he passed up the valley of the Saskatchawan, over the Rockies and down by Frazer's river a century ahead of the Canadian railroad, and wrote with perishable vermillion the imperishable record on the rock face fronting the Georgian gulf — "*A. McKenzie, by land from Canada*, 1791." Human interest legitimately ranks all others. You cannot take a pupil, in imagination down a river, unless there is a boat with a man in it. You cannot coax him over a divide unless he sees somebody climbing and crossing it. In these days of "going to and fro in the earth and walking up and down in it," there are real climbers, of whom we ought to know, both for our sakes and his own, but if they are not at hand, make imaginary ones.

A coast line, even though he trace it himself, will be as vague as very clouds, unless it is marked out with some "Voyage of a Paper Canoe," with its butting porpoises, on Delaware bay, and flocks of ducks and swans in Currituck sound; or with that line of a thousand lighthouses interlacing their long fingers of light from cape to headland along our nine thousand miles of ins and outs of shore.

And just here we would disavow and deprecate hostility to text-books of undoubted and increasing excellence. But the different use we all, even now, make of them is surely a sign, a measure of the modification of the future text-book in manner and make-up. Perhaps we should have a strong sensation of surprise if we could forecast correctly the class-books which we are to teach from, or rather teach with. *Supplementary matter*, a growing idea with a large future, will become more indispensable in use, more definite in character, and more systematic in construction and application. Within a few years,— within this generation — discovery and scientific exploration enhanced by whatever association appeals most powerfully to human interest and admiration, has given to the reading world, entertainment and instruction in knowledge and sentiment, such as it has never felt before. It has enthused middle-aged men to become students again; it is the moving inspiration of Chautauqua and the new Chicago University, and the still newer plan of university extension here in the East. This modern geography, for so it is, must transfer all the vantage of delightful interest down to the class-book and the class-room.

There should be a hand-book which would point out by index and reference where appropriate matter may be found in this and other literature. There then should be abundant selections where these are especially pertinent and epigrammatic. And then, since the books referred to may not be had when most needed, there should be a digest of matter ready prepared — for making up lessons where teachers are young and libraries scanty. And most of all, the book should furnish all along, intimations and hints how to recognize material, from the daily newspaper up to the Bible, for in recognition, not in seeking, lies the art, and when this is gained, material may be found where Thoreau picked up his Indian arrow heads, "*everywhere.*"

INSPIRING PUPILS TO HONORABLE ACTIONS.

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OBEDIENCE to constituted authority, in all its rightful demands, is, in the highest degree, honorable; but question may arise as to the rightfulness of some of the demands of authority, which is not always in wise executive hands.

The writer is a teacher. His rule is to discountenance complaining and tale-telling among his pupils. In case, however, of a grave misdemeanor, one reflecting upon all the scholars, upon either sex, or upon an entire grade, class, or other subdivision, he always, when otherwise unable to get at the facts, plainly states the matter to those concerned and old enough to consider it, shows how and upon whom it reflects, explains what he conceives to be their duty under the circumstances in order that the innocent may not be condemned or suspected as guilty, and, in conclusion, relates some incident like the one below — giving opportunity for confession within a specified time, in default of which he not only invites but urges information.

In no case has the guilty one ever failed to confess or to be otherwise discovered — confession being most generally the result of the course mentioned.

Should the misdemeanor amount to a violation of the law of the land, its investigation and punishment should be handed over to the proper legal officers and tribunals.

In the decision of questions within the province and discretion

of the teacher, he may well take counsel in doubtful cases; but he should seldom or never invoke the active interference of parents or school officials to aid him in the enforcement of school discipline. Occasions, however, may arise in which the teacher is fully persuaded that punishment should either exceed that limited by school authority or be otherwise inflicted; and then he ought not to hesitate to inform and advise those concerned.

SCHOOL INCIDENT.

In the summer of 18—, a student of a certain boarding school for boys and young men, silvered over with quick-silver an old-time copper cent, and passed it as a half dollar, without, however, so calling it, upon an ignorant old woman for melons and other fruit, getting back some minor silver change it may be, or receiving therefor a full half dollar's worth of fruit.

The students occupied all, except the front, of the third story of a building constructed around an open square, and had to buy ice, fruit, etc., at other than stated hours on certain days, by lowering bags from their barred windows to the dealers on the outside. This itself was an infraction of the rules of the school; but it was winked at, or, if detected by an officer and reported, was punished with demerit marks. In just such a forbidden transaction was the silvered copper used, and until its occurrence no itinerant vender had ever hesitated to send up anything called for, or, indeed, after it to those who were known; for the young men were noted for their scrupulously honorable dealings with all.

The old woman soon discovered how she had been defrauded. She made complaint to some of the students, though she could not tell who had wronged her, and the matter soon became the subject of much discussion among the scholars. Some one redeemed the silvered copper with a genuine half-dollar, and it was determined to discover the offender and have him punished.

By consent of the authorities a students' meeting was called; and, after some investigation, the guilty person was found. He acknowledged the deed. He had no excuse, not even the temptation of poverty to plead; for his means were abundant. Whereupon resolutions were immediately adopted, condemning the offense and requesting the prompt dismission of the offender.

The faculty assembled, indorsed the resolutions of the students and expelled the guilty young man from school.

When the sentiment of a school is on the side of order, gentle manners and good morals, and teachers set a proper example in their "walk and conversation," their manners, habits and mode of life, there will seldom be much trouble in discovering the perpetrators of misdemeanors of sufficient gravity to require the authorities to call upon pupils to give information against evil doers. It should seldom be done, and teachers ought never, perhaps, to call on their pupils to tell about minor infractions of rules. Who is more despised among children and grown people than the "swift" witness or informer? He is generally the blackest sheep of the flock. Self-reporting, as adopted in some schools, is apt to turn out adepts in lying rather than anything else. It should be forbidden by law.

Society is largely made up of ex-school-boys and ex-school-girls. Suppose that they, whilst in school, imbibe the false principles that it is honorable to conceal each others offences, to screen each other from detection, and even to lie in order to keep one of their number from punishment; how long before society will become utterly corrupt?

Each school is a miniature government. It should be ruled according to the general principles of truth, justice, mercy and common sense, in the genial atmosphere of love, and in all firmness. Upon the governor it depends whether or not he shall have the love and respect and cheerful obedience of his subjects.

How important, then, is the teacher! But teachers and schools should not be held responsible for the ill example and training of parents and other home and street associates. Pupils are with their teachers hardly as much as a day-and-a-half of each week, or not more than sixty full days out of the three hundred and sixty-five of the year even when the scholastic year is as long as forty weeks.

Is n't the school day, or the school year, getting too short for the pupil to derive the full benefit of association with his teacher in study and recitation, in work and play, and in social intercourse? Why not increase the pay of the teacher and lengthen the school day or school year so as to secure longer and more intimate social intercourse between the teacher and his charge? If a pupil should not remain in school more than two hundred days per annum, then, instead of compressing the same into thirty-three or forty weeks of six or five school days respectively, with vacation of nineteen or twelve weeks, during which much that

has been done becomes undone, why not extend the school period over the whole year for three or four days in each week?

It may not be possible to carry out these suggestions, and the writer states them chiefly to emphasize his profound conviction that the association between teacher and pupil is not as close and intimate as it should be, especially in our city schools where the school day has been reduced to the minimum and the school grade increased to the maximum, with the sole object, it would seem, of reducing teachers' wages and yet getting more work out of them. May not the generally recognized superiority of well conducted private schools, and even of the ordinary country school, public or private, in developing all the better elements of character, be due largely to the fact of the longer and closer daily association of pupil and teacher? If nothing more can be done, let the number of pupils per teacher be diminished by increasing the corps of teachers, so that no room in charge of only one teacher shall have more than thirty pupils — not more than twenty would be still better; and then the teacher can have some opportunity to develop and strengthen noble character, the highest object of all true teaching. In the celebrated report of the French commission of lady teachers sent some years ago to inspect our primary schools, special condemnation was set upon the large number of pupils assigned to rooms in charge of but one teacher each, upon the ground that character training could not well be carried on under such circumstances.

ON GROTE'S INTERPRETATION OF Ἀνέλπιστοι.

PROF. W. S. SCARBOROUGH, LL. D.

Καὶ νῦν οὔτε ἀνέλπιστοί πω μᾶλλον Πελοποννήσιοι ἐς ἡμᾶς ἐγένοντο, εἴτε καί πάνυ ἔῤῥωνται, τὸ μὲν ἐς τὴν γῆν ἡμῶν ἐσβάλλειν κἂν μὴ ἐκπλεύσωμεν, ἱκανοί εἰσιν, τῷ δὲ ναυτικῷ οὐκ ἂν δύναιντο βλάπτειν. ὑπόλοιπον γὰρ ἡμῖν ἐστιν ἀντίπαλον ναυτικόν. — Thucyd, VI., 17.

Grote renders this passage somewhat as follows: "As to the Peloponnesians, powerful as they were they were not more desperate enemies (*ἀνέλπιστοι*) now than they had been in former days: they might invade Attica by land whether the Athenians

sailed to Sicily or not; but could do no mischief by sea for Athens would still have in reserve a navy sufficient to restrain them."*

In a foot-note he tells us that the construction of ἀνέλπιστοι is not certain. Then he adds, "I cannot think that the meaning which Dr. Arnold and others assign to it is the most suitable. It rather seems to mean the same as in VII., 4, and VII., 47: enemies beyond our hopes of being able to deal with." Dale, on the other hand, gives us the following translation: "And as things stand now, never yet were the Peloponnesians more hopeless (ἀνέλπιστοι) with regard to us; and even if they are ever so confident, for invading our country indeed they are strong enough, even though we do not undertake the expedition; but with their naval force they cannot hurt us [though we do not undertake it;] for we have a fleet left behind that is a match for them."

A writer in the Journal of Classical and Sacred Philology † gives the sense of this passage as follows: "In the first place (τε) the Peloponnesians never were so hopeless of success (ἀνέλπιστοι) against us; and secondly (τε), supposing them to be in ever such good heart, they can but invade us by land, and that we cannot prevent in any case while we shall always have a sufficient naval force at home to prevent their attacking us by sea." This interpretation I have adopted as the one most in accord with the facts in the case, both historical and linguistic, and, therefore, the one most probable.

It is evident that Dale and the writer just quoted, agree as to the construction and meaning of ἀνέλπιστος, and that both are opposed to the historian Grote.

If we turn to the lines referred to by Grote, we shall find that instead of strengthening the ground taken by him, the passages in question make his position utterly untenable, and consequently, unjustifiable. I quote: *προσεῖχέ τε ἤδη μᾶλλον τῷ κατὰ θάλασσαν πολέμῳ, ὁρῶν τὰ ἐκ τῆς γῆς σφίσιν ἐπειδὴ Γυλιππος ἥκεν ἀνελπιστότερα ὄντα.* — Thucyd, VII., 4.

The second: —

* * * * *Καὶ τὸ χωρίον ἅμα ἐν ᾧ ἐστρατοπεδεύοντο ἑλῶδες καὶ χαλεπὸν ἦν, τά τε ἄλλα ὅτι ἀνέλπιστα αὐτοῖς ἐφαίνετο.* — Thucyd, VII., 47.

In both instances the adjectives (ἀνελπιστότερα, ἀνέλπιστα) are

* Vol. VII., P. 154, History of Greece. (Am. Ed.)

† Published in London, 1834.

neuter, and have what may be called a passive signification; while in the passage under consideration the word is used actively, as also in VIII. 1. (*ἀνέλπιστοι ἦσαν σωθήσεσθαι*).

Dr. Gottfried Boehme* says in his note on this passage, "*νῦν* könnte man aus einer Brachylogie erklären, indem gedacht näre: und jetyt steht die Sache so: nie waren die Pelop. hoffnungsloser: doch besser nimmt man wohl eine Vermischung zueier Redeweisen àn: 1) und jetyt sind die Pelop. hoffnungsloser als je, 2) und noch nie waren die Pelop. hoffnungsloser als jetzt. — *ἀνέλπιστοι* aktiv. s. 8, 1, 2 und in etwas verschiedenem Sinne 3, 30, 2. In passiver Bedeutung, wie es Kr. erklären enöchte, kommt es bei Thuk. nur von Sachen, nicht von Personen vor (s. Bétant lex.)."

Another passive use of *ἀνέλπιστος* is found in VI., 33, 34: *καὶ οὐκ ἀνέλπιστον ἔμοιγε κ. τ. λ.*, also, *καὶ ἡμῖν οὐκ ἀνέλπιστον τοιοῦτο ξ. υμβῆναι κ. τ. λ.* — *δοκεῖ δέ μοι καὶ ἐς Καρχηδόνα ἄμεινον εἶναι πέμψαι οὐ γὰρ ἀνέλπιστον αὐτοῖς, ἀλλ' ἀεὶ διὰ φόβου εἰσὶ μή ποτε Ἀθηναῖοι αὐτοῖς ἐπὶ τὴν πόλιν ἔλθωσιν, κ. τ. λ.*

If it is true that when applied to things *ἀνέλπιστος* has a passive signification, as has been stated, it is very doubtful whether an instance can be found where, in its passive sense it is applied to persons. If, however, there are any examples illustrative of this application of the adjective, I have not been able to find them. As in Latin, so in Greek, we find words and especially adjectives used in this double or twofold sense — actively and passively — their signification depending upon the gender of the substantive with which they agree. *Fidus* when spoken of in its relation to persons may be rendered: *faithful*, *trusty*, *reliable*, etc., when used with neuter substantives it takes a *transferred* meaning, *sure*, *safe*, etc.

Diffugiunt alii ad nares, et litora cursu
Fidi petunt.—Verg. Aen., II., 399.

Mentita may be mentioned as another example: —

Primi clypeos mentitaque tela
Agnoscunt, atque ora sono discordia signant.
— Verg. Aen., II., 422.

Other examples may be given, and these are only a few of the many that frequently occur in Latin authors: *castus*, of persons, *spotless* — of things, *sacred*, e. g., *nemus castum; benignus*, of per-

* Thukydides, fur den Schulgebrauch erklart von Dr. Gottfried Boehme, Professor und Prorector am Gymnasium zu Dortmund.

sons, *friendly*, *kind*, *benevolent* — of things, *rich*, *fruitful*, *abundant*; *blandus*, of persons, *bland*, *persuasive*, *smooth-tongued* — of things, *agreeable*, *enticing*, *pleasant*; *beatus*, of persons, *blessed*, *happy*, *rich*, *wealthy* — of things, *splendid*, *magnificent*, e. g., *gazæ*, *beatus*; *durus*, of persons, *hard*, *rude*, *obdurate* — of things, *irksome*, *arduous*, *troublesome*; *incautus*, of persons, *incautious*, *unsuspecting* — of things, *dangerous*, *unsafe*; *inimicus*, of persons, *hostile*, *unfriendly* — of things, *unfavorable*, *injurious*; *iniquus*, of persons, *hostile*, *unfair*, *unjust* — of things, *hard*, *severe*; *severus*, of persons, *serious*, *grave*, *stern* — of things, *rough*, *frightful*.

φοβερός, like ἀνέλπιστος, is often employed in a double sense. In Thucyd, II., 3, the translation of φοβερός is *timid*: "when things were in readiness, as far as they could make them so, having watched for the time when it was still night and just about daybreak, they began to go out of their houses against them; that they might not attack them by daylight, when they would be bolder, and on equal terms with themselves, but in the night when they would be more timid (φοβερύτεροι), and fight at a disadvantage through their own acquaintance with the city."[1] In VI., 55, it expresses the idea of terrifying: "But owing to his former habit, both of striking fear (terrifying, φοβερόν,) into the citizens, and of paying strict attention to his mercenaries, he retained his sway with abundant security," etc.[1]

Though we find the terms ἔχθροι and πολέμιοι *seemingly* used indiscriminately in Thucydides as often applied to one party as to another, yet we observe no instance in which ἀνέλπιστος is employed as a synonym of either or both.

The adjective with its noun-forms and verb-forms, simple and compound, is of frequent occurrence in Thucydides with meaning more or less fixed, and there could have hardly been any doubt in the mind of that historian as to its real signification.

(a) — In bk. I., ἀνέλπιστος does not occur; in bk. II., it occurs once; in bk. III., three times; in bk. IV., once; in bk. V., once; in bk. VI., five times; in bk. VII., three times; in bk. VIII., once: *total*, *fifteen times*.

(b) — Ἀνέλπις (hopelessness) does not occur anywhere in Thucydides.

(c) — In bk. I., ἐλπίς occurs six times; in bk. II., fourteen times; in bk. III., eight times; in bk. IV., five times; in bk. V.,

[1] Dale's Translation.

five times; in bk. VI., six times; in bk. VII., ten times; in bk. VIII., nine times: *total, sixty-three times.*

(d) — In bk. I., ἐλπίζω, with various forms of the participle, occurs five times; in bk, II., eight times; in bk. III., four times; in bk. IV., eleven times; in bk. V., six times; in book VI., five times; in bk. VII., five times; in bk. VIII., four times: *total, forty-eight times.*

WHOLE NUMBER OF INSTANCES, 126.

(a) — As ἀνέλπιστος does not occur in bk. I., there are no examples illustrating its use and construction.

Ἀνελπίζω occurs but once (Bk. 1–70), and that too, with the meaning, *to hope instead* or *in turn:* "Then, if they fail in an attempt at anything by forming fresh hopes in its stead, they supply the deficiency; for they are the only people that succeed to the full extent of their hopes in what they have planned, because they quickly undertake what they have resolved." — ἣν δ' ἄρα του καὶ πείρᾳ σφαλῶσιν, ἀντελπίσαντες ἄλλα ἐπλήρωσαν τὴν χρείαν. κ. τ. λ.

I have examined with some care many Greek authors, and am unable to find ἀνέλπιστος conveying a meaning different from the usual one: *hopeless, something unexpected, unlooked for,* however greatly the object may be desired. For example, in the Suppliants of Aeschylus (319, κ. τ. λ.), the king of the Pelasgians says to the Chorus: "You seem now to me to share this land of old; but how did you dare leave your paternal abodes? What misfortune has come upon you?"

The Chorus responds: —

ἄναξ Πελασγῶν, αἰόλ' ἀνθρώπων κακά.
πόνου δ' ἴδοις ἄν οὐδαμοῦ ταυτὸν πτερόν,
ἐπεὶ τίς ηὔχει τήνδ' ἀνέλπιστον φυγὴν
κέλσειν ἐς Ἄργος κῆδος ἐγγενὲς τό πρὶν,
ἔχθει μεταπτοιοῦσαν εὐναίων γάμων;

In Sophocles (Tr. 673), Deianira speaks of a circumstance that occurred as being an *unexpected* (ἀνέλπιστον) marvel.

Again, in the Electra (186, κ. τ. λ.) of the same author, the following occurs: "But from me the greater part of life hath already passed away *without hope,*" etc., etc.,

(ἀλλ' ἐμὲ μὲν ὁ πολὺς
ἀπολέλοιπεν ἤδη
βίοτος ἀνέλπιστος κ. τ. λ.).

In the Helen of Euripides (411, κ. τ. λ.), the poet puts into the mouth of Menelaus, these words: —

τρόπις δ' ἐλείφθη ποικίλων ἁρμοσμάτων,
ἐφ' ἧς ἐσώθην μόλις ἀνελπίστῳ τύχῃ
Ἑλένῃ τε, Τροίας ἣν ἀποσπάσας ἔχω.

Theocritus (Idyll IV., 40–44), makes Corydon, the cow-herd, use the following language: —

Θαρσεῖν χρή, φίλς βάττέ τάχ' αὔριον ἔσσετ' ἄμεινον,
Ἐπίδες ἐν ζωοῖσιν ἀνέλπὶστοι δε' θανόντες χὠ κ. τ. λ.

In ἐλπίδες ἐν ζωοῖσιν ἀνέλπιστοι, κ. τ. λ., we have two contrasted ideas, "hope in life — hopelessness in death," or, while living there is always hope for the better (ἔσσετ' ἄμεινον), but dead, our hopes are "blasted" (ἀνέλπιστοι θανόντες).

The same thought is expressed by the poet, Tibullus: —

"*Credula vitam*
Spes fovet et fore cras semper ait melius."

It is unnecessary to quote further. Suffice it to say, that examples are to be found in Plato, Xenophon, Demosthenes, Andocides, etc., illustrating a similar meaning and construction of this adjective — all of which prove that Grote has greatly erred in his interpretation of it.

As a matter of history it will not be out of keeping with the design of this paper to give in conclusion a brief summary of the causes and results of this great struggle, as it will aid in our purpose to show that there was no ground, no just ground at least, for asserting that the Athenians regarded the Peloponnesians as desperate enemies before the battle of Aegos Potami. I quote the language of the historian himself: [1] —

"The Peloponnesian war was a conflict between Athens and her allies, on the one hand, and Sparta and her allies on the other. It began in 431 B. C., lasted twenty-seven years, and ended in weakening Greece generally, and in completely destroying the Athenian ascendancy."

"This war was occasioned by the jealousy which the great power of Athens stirred up among many other of the Greek cities; but it had in reality a deeper cause; it was the outbreak of an irrepressible conflict between Ionians and Dorians, between democracy and oligarchy, — Athens being the chief of the Ionian and democratic states, and Sparta the chief of the Dorian and

[1] Swinton's Outlines of the World's History (Ancient and Modern), page 100.

aristocratic states. The immediate occasion of the war was a conflict between Corinth and one of her colonies, Corcyra. Siding with the latter, Athens executed the wrath of the Dorian confederacy ; and a Spartan army invaded Attica 431 B. C. During the first ten years of the war, down to 421, the two parties contended with nearly equal success, the Athenians being much the stronger by sea, and the Spartans and their allies by land. A peace was then concluded, called the peace of Nicias (421 B. C.), which was to last for fifty years; but as many of the confederates were dissatisfied with its terms, it was not likely to be of such long duration, and indeed, hostilities were renewed almost immediately."

"The renewal of the war was precipitated through the political influence of Alcibiades,[2] a handsome, dissolute young disciple of Socrates; he possessed brilliant talent, but he was ambitious, and he was eager to renew the war, as affording him an opportunity of personal distinction."

"Alcibiades brought forward a scheme of conquering Syracuse, a city in Sicily. It was a bold scheme, and its successful execution would have given a great preponderance to Athens over Sparta. The Athenians adopted the plan, and in B. C., 415, sent a fleet and force against the Syracusans. Sparta sent aid to the Syracusans, and thus the Peloponnesian war was renewed. In the midst of the enterprise Alcibiades was recalled to Athens on a charge of impiety; but he managed to escape, and went over to Sparta. The Syracusan expedition proved a total failure (413, B. C.), and greatly damaged the power of Athens. During the last eight years the Peloponnesian war was carried on mainly at sea, off the coast of Asia. Sparta allied herself with Persia, and it was Persian gold that afforded Sparta the means to continue the contest against Athens. Athens, however, made a bold front, and under the lead of Alcibiades (who had meanwhile been recalled to the command), kept up the contest with wonderful vigor. But a fatal blow fell when the Spartan admiral, Lysander, surprised the beached galleys of the Athenians at Aegos Potamos in the Hellespont, B. C., 405. The siege and surrender of Athens in the following year brought the great Peloponnesian contest to an end."

"The result of the Peloponnesian war left Sparta the greatest power of Greece. Athens sank into the background as a second-rate state ; still, while she lost her political supremacy, she became more and more the leader in literature, art and philosophy."

[2] Vide Grote, also Thucydides.

"After the decline of Athens, Sparta stood without a rival in Greece, and for thirty-four years from the victory at Aegos Potami to the defeat of Leuctra (405, 371 B. C.) the Lacedaemonians exercised an undisputed sway in Greece."

From this period, if ever (the downfall of Athens), the two powers, Athens and Sparta, might be regarded as "*desperate enemies*"—*enemies beyond our hopes to deal with.*" If this view be accepted as tenable, may we not then assert from an historical standpoint, that Grote's interpretation of ἀνέλπιστος is untenable; and that Alcibiades meant in his speech before the Athenian assembly, convened to hear the report of their commissioners on their return from Egesta, that the Peloponnesians were "*hopeless*" in the sense that they were not powerful enough, had not resources enough to make a successful resistance against the Athenian forces? Up to the time of the Athenian defeat there was no reason whatever for believing that the two contending parties were uncompromising enemies, other than a desire on the part of the one (prompted by jealousy), to surpass the other in glory, in power, and in the extent of conquests; no ground for affirming that deadly hostilities, beyond reconciliation, existed between the rival parties until the lustre of Athens began to wane, while that of Sparta began to increase. Then, and not till then (after the battle of Aegos Potami), it seems to me, are we justified even on historical ground in rendering ἀνέλπιστοι "*enemies beyond our hopes of being able to deal with.*"

STATE EDUCATION—ITS PURPOSES AND NEEDS.

PRES. W. M. BEARDSHEAR, AMES, IOWA.

THE purposes of state education should be three-fold. Cultured muscle, well trained mind and a sound mental sense to the end that every member of the state may be just as much of a citizen as the material on hand will allow. A strong mind in a weak body is necessarily crippled; a strong body with an uncultured mind is seriously limited; a diseased and infirm member of the Republic is a dead weight on society in proportion to the degree of his disability. The state should enable a young person to see the mental side of manual labor. It will give him a more

exalted view of the value and honor of labor, a clear knowledge of form and a more thoughtful mastery of the hand.

For the mind more than knowledge is needed. For the truest sovereignty of the individual citizen there must be self mental activity. It is dangerous to have a few demagogues do the thinking for the lower masses of a city or country, and unfortunately this class of thinkers has a large audience among the ignorant. A limited amount of mental training will go a great way toward fortifying an individual against the ills of society and the designs of demagogues. It will check and prevent a wondrous waste and loss of human faculties. Learning without a sound moral sense has the dangers of ignorance fortified by intelligence. The rights of man for man, high or low, can be assured only by a profound moral integrity. In the very beginning of congressional land grants for the support of the public schools, in the famous ordinance of 1787, we find a significant and fundamental declaration that has been embodied in most of the state constitutions throughout the Union. "Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall be forever encouraged." In setting apart the central section of every township for the maintenance of the public schools they debated long the practicability of devoting the section just north of the central one in each township for the purposes of religion. And, while they wisely did not give this north section to the support of religion, yet by this far reaching doctrine they placed the school to the south and on the sunny side of religion forever afterward in this land. We are rapidly withdrawing from the polemics of early school history and coming to the sound principle that "a good thinking machine inside a pupil's skull with a good heart and body attachment is the best equipment a boy can have for the battle of life."

One of the imperative needs of the hour is more professional training for teachers. The teacher should have had a good general education which may serve as a diamond in the rough for the skill and refinement of a thorough normal training. The teacher, like a guide in a strange country, to be successful, must know not only one but many paths; whither they lead and where they intersect. Careful inquiries as to the defects of our common schools attribute twenty-eight per cent to defective courses of study and thirty-three per cent to deficient preparation of teach-

ers, making sixty-one per cent of the causes to rest with the teacher. Much is also attributed to defective plans and defective methods. The teacher is almost everything in successful school work. I am fully aware that owing to the necessities of other years in the rapid development of our country's forces, many persons had to learn teaching by experimenting upon the children, but with the greater facilities at hand we should emphatically urge a thorough normal training on the part of our young people preparatory to the teaching of school. I mean by normal training a careful study into elementary, secondary, and if possible, higher education, discovering the relations of these respective divisions, their strength and weaknesses, obtaining a mastery of the branches to be taught, thorough discipline in the methods of teaching and an intimate acquaintance with the principles underlying these methods. The age of mere school-keeping cannot pass away while three out of every four of the teachers in our schools are untrained.

Another need is a more systematic, intelligent, and ardent teaching of English in our schools. Where there is a community of interests like that of a great Republic there should be a common medium of communication. There should be the kindest regard for peoples of all nationalities and a friendly sympathy for the tongues of their native lands, but as a nation we owe it to them, and as adopted peoples they owe it to us to have a good understanding of the English language; the medium of our laws and commerce, the conservator of our history and civilization, and the channel of the heart and conscience of the American people. A community or section of country that makes some other language primary has prejudices of its own, and is consequently suspicious of the world about it. According to Milton, "A complete and generous education fits a man to perform justly, skilfully, and magnanimously, all the offices, both private and public, of peace and war." No individual who is deprived of at least an elementary knowledge of English can have a complete and generous education for American citizenship, and perform skilfully and magnanimously the offices of his citizenship. Let our national tongue be first and other languages secondary.

But there is still much more to do in the higher scientific study of the English language. There has been a lack of systematic arrangement for the study of English in the various courses of

our institutions. We need to master English by using it in its purity and at the same time early learn to give a technical reason for the grammatical faith that is in us. You remember that there came into the studio of Appelles, the ancient painter, a person clothed in gold and gems, imposing in appearance and with an awe-inspiring presence. This mysterious personage passed about the room in silence, awing master and pupil alike. But when he spoke the spell was broken and Appelles interrupted him by saying, "Whilst thou wast silent thy solemn state, thy gold and purple ornaments secured to betoken thee something great, but now that thou hast spoken the meanest boy in my shop cannot choose but despise thee." While there is commendable progress made on the part of many of the pupils of our schools and students of our colleges, yet their knowledge and use of the English language breaks the spell that binds us too much like the experience that awoke the old painter and his pupils of old. While I have great regard for the study of ancient and modern languages and encourage it heartily, yet I would prefer to have the children of American schools fully imbued with the sentiment as to their own language first and these others afterward, that actuated Paul as to the gift of tongues: "I would rather speak five words with my understanding, that by my voice I might teach others also, than ten thousand words in an unknown tongue."

An additional need of state education is a more definite and systematic instruction as to our own history, institutions, and laws. The ancient Romans used to place busts of their warriors and statesmen in the vestibules of their houses, and as the children passed in and out some one of the family called attention to these heroes, related their virtues and urged the children to a faithful imitation. This method fired the youth with an honorable ambition and made the spirit of the Roman citizen the type of loyal citizenship for all ages. Any sovereign of a foreign principality or kingdom is taken in his youth and thoroughly indoctrinated in the genius of his government, familiarized with its history and imbued with its most loyal sentiment. There remains no more strategic point for the welfare of our nation within the power of state education than that of a judicious teaching of civics in our schools and colleges. Our recent histories are teaching us that there is more in history than war. That men noted for benevolence, inventive genius and industry work greater revolutions than the sword; that

the institutions, laws, and interests of the people have a vital share in its prosperity and glory. The study of the town, the county, and the state government; the getting the principles of the Declaration of Independence into the mind and heart of the child, the analysis of the constitution and an acquaintance with the leading men of American history will do the children and the nation more good than so many years of extra mathematics, and should have the first rank in the curricula of our higher institutions of learning.

A need that is rightfully attracting much attention and about which there is serious diversity of opinion, is that of compulsory attendance at school. The indifference of parents and the selfishness of employers are formidable barriers in the way of education. In the lower order of intelligence the less education the people have the less they desire. In some states an alarming condition of school interests is manifest. In New York State for example while there is much commendable progress in vital particulars, yet the per cent of the whole number of children of school age has uniformly decreased. In 1851 the per cent of school population and attendance upon schools was 75.6; in 1861 it had fallen to 65.2; in 1871 to 68.4; in 1881 to 61.4 and in 1888 it was 58.2; smaller than in any previous year. While this state of affairs is not characteristic of all portions of our country, yet the large per cent of children in non-attendance upon schools is one of our universal and national evils. It perpetuates a great mass of unwieldy and largely unproductive people. The state expends millions of dollars in making reparation for this ignorance. And like the old man in the Arabian Nights riding the traveler, its foul, clutching embrace is released neither day nor night. If education is "the cheap defense of nations" no more philosophical, economic or effective defense of our national interests can be made than that of the universal education of the people. If true in England, doubly so is Lord Brougham's doctrine true in America; "The schoolmaster is abroad and I trust to him armed with his primer against the soldier in full uniform array."

As to the worldly fortunes of the people education bears a productive and enhanced power. For centuries men were versed in architecture, mathematics, history, poetry, and oratory without knowing how to make a good wagon wheel. They built magnificent temples and wonderful edifices of art before being able to

build a good dwelling house. Cases are numerous of nations also proficient in science and art long years before inventive genius made better the condition of the working classes. The reason is simple. The labors and burdens of daily life were performed by ignorant people. It was a matter of animal force. As soon as the laboring people began to be educated how wondrous was the transition. Inventions of every kind sprang up as by magic, and most prolifically from the quarters in which the heaven-born leaven of intelligence most fully exerted its influence. In our own country, New England, the old homestead of our public schools, invented the cotton gin and numerous inventions that have revolutionized industry and trade, while the South in the black night of human bondage toiled on largely by mere physical forces. Experience shows that in the factory and on the farm the lowest wages are commanded by the most ignorant persons. These, breaking more machinery and wasting time and energy through inaptness to execute plans, are also the most costly of all hands to the employer. It has been said that "The greatest of all arts in political economy is to change the consumer into a producer, and the next greatest to increase the producer's producing power — a thing to be directly attained by increasing his intelligence."

Again, large ideas cannot flourish in ignorant minds. The conceptions of government and human liberty in this land are the grandest known to history. As on sand hills there can be only a few straggling spears of stunted grass and upon hog-back ridges the dwarfed oak, so in the mind of the uneducated can only flourish the least desirable ideas pertaining to the genius of our government. Our institutions had their conception and birth in the minds of men of broad culture, and were committed for their perpetuity to the individual citizens of this great Republic, thereby obligating each one for the sake of his own personal honor, for the sake of his native land, and for the love of his own liberties and institutions to make himself a sovereign worthy of these royal trusts and responsibilities. The child owes it to the state to be educated and the state owes it to the child to *see* that he is educated. If his parents do not appreciate these vital interests of this country, they should feel the force of a wholesome law to compel them to send him to school. The state assumes control of the individual where the individual ceases to do that which

will conserve the best interests of the whole. Therefore, we should have a compulsory law on education in every state and territory of the Union. Our American Ministers at London, Paris, and Berlin report as to the methods of education in these respective countries, that in all, children are required to attend school, and that indigent children are furnished with clothing, and meals in the middle of the day. No one prizes his liberties more than the Swiss in that mountain home of freedom, and there each canton is provided with sufficient primary instruction which shall stand under the exclusive and obligatory control and supervision of the state. Compulsory education is not regarded by that liberty loving people as an infringement on personal liberty.

> "Oh for the coming of that glorious time,
> When prizing knowledge as her noblest wealth
> And best protection, this imperial realm
> While she seeks allegiance, shall admit
> An obligation on her part to teach
> Them who are born to serve her and obey;
> Binding herself by statute to secure
> For all the children whom her soil maintains
> The rudiments of letters." —WORDSWORTH.

More vital than any of these needs is that the moral sense of the pupil be more earnestly quickened and warmly fostered. The discussion of the Bible in public schools is somewhat detracting from the real merit of the case. The efforts of a few school boards in our country to purge text-books of all religious allusions and teachings under the profession of wholesome moralities reminds me of some pumpkins that used to grow on the farm. They were large in size, prolific in rind, standard in color, but had no nutritious substance inside, and when picked up their lightness and the rattling of seeds bore loud evidence of a bastard fruit for which neither man nor beast had any liking. The dust of these polemics should not becloud our eyes as to the imperative need of teaching morals in our public schools. It is not a matter of precept so much as of example. The incidental teaching of morals will do more than sermonizing. Morals directly or indirectly are rooted in that wondrous word *ought*, whose central force is conscience. An *ought* to have any force must have in it a supreme Being. The Jew, the Catholic, and the Protestant believe in a supreme Being, and could consistently join hands in a

system of ethics that recognizes the God that presided over the destinies of the Mayflower; whose influence Franklin caused to be invoked upon the launching of the civic constitution; whose guidance Washington, in the bush upon his knees, sought in the Revolution and of whom in the dark days of our civil war Garfield said: "God reigns and the government at Washington still lives."

Infidelity is sectarianism and sectarianism has no place in our schools. The creation of a proper moral sentiment in the children is the strongest safeguard of the nation. Sentiment lies between opinion and feeling and is the resultant product of the harmonious and rightful action of all the faculties of the soul on a given subject. It is the essence of virtue vitalized and prepared at a moment's warning to let loose its powers against wrong of any form. It is the most potent influence that can be brought to bear upon the conflict between capital and labor of to-day. It insures honest business methods and a high regard for the rights of others. It is more powerful than a constabulary in the maintenance of good laws and that which will keep the poor from counting the rich their sworn enemies, and prevent the rich from making the poor the victims of their avarice. A healthful, moral sentiment is a great bulwark of righteous law. He that stops with precept is the child that finishes his learning in the a-b, abs. Precept is valuable only as a condition of a healthful moral sentiment.

You ask me how this is to be brought about. First of all there must be a teacher with a most wholesome moral sentiment that can prove the birth element of his government, the grace of his teaching and the secret of his power. As sure as the sun warms the earth to life and beauty so surely will such a teacher get into the habits of thought and life, into the social dealings and sense of truth and right on the part of each child under him. Moral worth is contagious, and no one in the room can wholly escape its effect. It beams out of the eye, oozes out of the touch of the hand, quickens through the voice and by the life of the teacher fills the atmosphere of the schoolroom with its fragrance. This helps him in teaching the lives of the good and the great men of his age and country's history; it makes him efficient in the teaching of the reading lesson, the memory gem, the maxim, and in combining the social events of the school and environment so that the teacher and pupil may come to a practical demonstration of

Mr. Huxley's idea of an education: "To accustom myself to do the thing I know I ought to do at the time when I know I ought to do it, whether I feel like doing it or not." And thus will be realized the sentiment approved in the last report of the United States Commissioner of Education. "The schools must send out boys and girls whose habits of thought, system of business, and uniform adherence to right have all been awakened, stimulated, and exercised along proper channels of life until the state may safely repose in them full confidence."

Let Robert Southey exhort America as he did England: —

> "Train up thy children in the way
> Of righteousness and feed them with the bread
> Of wholesome doctrine. Where hast thou thy mines
> But in their industry? Thy bulwarks where but in their breasts?
> Thy might but in their arms?
> Shall not their numbers therefore be thy wealth,
> Thy strength, thy power, thy safety and thy power?"

EDITORIAL.

DR. WM. T. HARRIS, United States Commissioner of Education, has recently given a series of four lectures on the "Practical Lessons in History," in the historic old South Meeting House of Boston. The subjects treated on successive Saturday forenoons were "Oriental History," "Greece," "Rome," and "Modern Civilization." Our readers do not need to be told that these themes were treated in a broad, incisive, philosophical and instructive manner. They were listened to with increasing delight and edification by a goodly company of teachers and scholarly people of Boston and vicinity.

MISS EMMA CONNORS, an Indiana teacher, deserves honorable mention for her heroic love of country. Some time ago, with the help of her boys, she raised a flag-staff and set the stars and stripes floating on the breeze. Next day some roughs cut down the pole and carried off the flag. Since then she has received a silken flag which she declares that she will defend with her life. All honor to her and to every teacher who is inculcating love of country in the hearts of the young. As for the roughs in question, they severally deserve the fate to which Edward Everett Hale consigns Philip Nolan, "The Man without a Country."

NO department of the national government has been developed in a more thoroughly practical and scientific way, illustrating more thoroughly the republican ideal of Civil Service, than the National Bureau of Education. In its modest beginnings, as outlined by James A. Garfield in his prophetic speech in the House of Representatives, it took its place at the foot of the column, as the least pretentious bureau of the great storehouse of official rubbish, the Department of the Interior, which, so far, has never found a competent cabinet chief, and yet is destined to graduate several new governmental departments as the years go on. With only an income of $5,000 annually, and never a worthy salary for its commissioner, it has had the good fortune, in the four admirable men who have held that position, to find at each period of its growth "the right man in the right place." No man so well knew the present condition and future possibilities of American education at the close of the civil war, as Dr. Henry Barnard, the Erasmus of the new education. His first report was really the first announcement to the country that education was a matter of national concern;—a challenge to American statesmanship that, hereafter, young America, and its teachers, was to be taken account of in national politics. To Hon. John Eaton, the second commissioner of education, the country owes a debt so much greater than its present ability to estimate, that only a better instructed generation will be able to compass the magnificence of conception, the tireless energy, the marvellous tact and the Christian patriotism that crowded, into the few years of his official service, the work of a laborious lifetime. Commissioner Eaton may justly be regarded as the father of the present system of American educational statistics. His broad comprehension of the true relations between the different departments of educational activity, with a thorough grasp on its central region, the common school; his double experience as a New England and western school-master, and military and civic labors in the inauguration of the common school for both races in the South; his personal accessibility and generous mental hospitality; his rare skill in choosing and working with the remarkable body of educational experts that gravitated as by affinity to the bureau; his singular aptitude for overcoming prejudice, and allaying suspicion, which finally brought the representatives of the reconstructed South into hearty accord with his plans and secured increasing appropriations from Congress; wrought such results as perhaps have never before been achieved in the country with such a meagre supply of money, and an environment of indifference and hostility so formidable. John Eaton will be known by the school men of the future as the discoverer of the new world we even yet talk loosely about as the American system of Universal Education; spite of all its apparent crudities and

disorders, a veritable system, wrought out by the practical genius of our people to meet the growing emergencies of successive generations. The library of reports and documents issued under his administration, is a vast mine of information, suggestion, and argument, indispensable alike to the school-men and statesmen. In the Hon. Mr. Dawson, of Alabama, the southern states had an able, progressive and patriotic representative of its rising movement in educational affairs in the Commissioner's chair. With excellent judgment he availed himself of the new historical spirit developing in these states, to put before the country the first reliable information of the educational past of the South, in a series of interesting "Circulars of Information" relating to education especially in the Atlantic southern states. He also demonstrated his official wisdom in retaining the admirable corps of experts, whose labors through the previous years had made possible the rapid growth of the bureau in the confidence of the educational public at home, while attracting the attention of similar departments abroad.

ALL things were ready for the "New Departure" inaugurated by the present Commissioner of Education, Dr. Wm. T. Harris. The volume of two hundred and twenty-five pages; — entitled PART FIRST OF THE REPORT OF THE COMMISSIONER OF EDUCATION, for the year 1888–9, with the commissioner's introduction and the contents of Parts I., II., III., special editions; — explains the significance of this new departure as no description can set it forth. We commend this volume to the educational public of the country as the most important contribution to American education since the days of Horace Mann. Indeed, it is the first successful attempt, by an American school man, to place before the world in an intelligible and philosophical statement, the real magnitude, quality and significance of the American system of universal education, contrasted and compared in a judicial spirit with the systems of the European nationalities. By the aid of his accomplished assistants, the Commissioner has been able to present concise and thoroughly reliable statements of the educational systems of England, France, Germany, Austria, Hungary, Switzerland, Italy, Sweden, Finland, Spain, and Brazil. The Commissioner's introduction is a masterly statement of the present condition of educational affairs in the country, including the differentiation of the American from the leading European systems, as representing the genius and history of each of the great families of peoples in Christendom. The forthcoming portions of the report, which will consist of two volumes, promise an additional treat; especially in Part II., relating to normal schools, manual and industrial training, courses of study, religious instruction, compulsory education, text-book laws, school savings banks, and a general discussion by school officials.

IT was none too early that the analysis of the different educational systems of the foremost nations of Christendom should thus be presented, in a form so compact and readable, condensed from such fullness of information, wrought out with such judicial impartiality and hearty appreciation of the characteristic features of each, with such forcible statement of the American point of view. Just now, the American common school is under fire, from the criticism of the college and university men, enamored of the completeness and superb "running order" of educational life in Germany. In the estimation of some of the most eminent of these critics, our American schooling is a vast hotchpotch of contradictory, pretentious, and superficial elements, a sort of floating island, blown hither and thither by every popular cyclone, with a periodical baptism in the muddy waters of local partisan politics. On the other hand, the priesthoods especially of those religious bodies composed of recent European emigrants, are laboring with all their might to swamp the common school in a new deluge of sectarian intolerance; while the ultra scientific fraternity propose to cut its tap-root of practical religion and Christian morality, and convert the people's school into a blooming flower of ethical evolution wired upon the dry stick of materialistic secularism. To all these parties, ready at any signal to act together, the present New Departure of the National Bureau of Education calls a halt in the present report of its commissioner. Here is clearly seen the characteristic genius of the American system; developed, like everything else American, through the growing intelligence and experience of the whole people; like everything else in the Republic, "in the making"; but with its great lines of advance already so broadly marked that no hostile influence is likely to obliterate them. The three things that the people of the United States will not do are: First, place the training of American children and youth for American citizenship in the hands of a despotic Bureau, representing the government as distinguished from a faithful representative of the people. Second, subsidize the different religious denominations, through their clergy, to assume the superintendence, even of the moral training for American citizenship. Third, to reconstruct the primary and secondary departments of the public school system to meet the demands of a group of university men, inspired with the ambition to train a ruling class in a way corresponding to the methods of the British and Continental higher education. The reasons for this decision appear whenever, as in the admirable report, the different systems of national schooling are set forth. We have much to learn educationally from Europe, but here, as in all other departments of American life, our great success has come from following the lead of those popular American instincts and aptitudes which,

in the face of chronic European disapproval, in one short century have lifted the little backwoods republic of 3,000,000 of people, to the proud position of the United States of America of to-day.

AS we go to press a National Conference on University Extension is being held in Philadelphia, on December 29th, 30th, and 31st. Representatives are expected to attend this Conference from all the leading colleges and universities of the United States and Canada, as well as some from abroad. It will be a grand opportunity to get fully acquainted with this system of teaching, and its interesting points will be thoroughly canvassed. This great movement seems to be getting well under way and acquiring added momentum with each passing day. It is the day of the people and they will reap the benefit of university extension. May the ripest and wisest scholarship guide the movement.

BOSTON offers exceptional advantages to those who enjoy courses of lectures. Dr. Wm. T. Harris has finished his series of four lectures, at the Old South Meeting-house. But other valuable courses are being given there. At Huntington hall, Pres. C. W. Eliot has been delivering a series of thought-provoking Lowell Institute lectures on "Educational Changes and Tendencies." Many of our wisest educators will sharply dissent from the views he expresses, but the great merit of his utterances lies in their power to compel thought. At Steinert hall, Dr. L. Sauveur is in the midst of twenty French lectures on such themes as "Alfred de Musset," "Le Cid de Corneille," "Béranger et Napoleon," "Tolstoi," "Voltaire," "La Republique française," etc. At the Normal School building, Dr. Larkin Dunton is giving a course of twenty lectures on "The Science of Education," which will extend through January and February. Here are a few of the subjects discussed: "Laws of Association," "Development of Memory," "Creation of Motives," "Methods of Teaching," and "Methods of Discipline."

IT was our good fortune recently to hear Andrew Carnegie and Robert Burdette, in Philadelphia's famous Academy of Music. The occasion was the graduating exercises of the Pierce Business College. On the platform were some of the richest and some of the brainiest men of the city of Brotherly Love. Fully four thousand people faced the speakers. The graduating class were one hundred and twenty-eight callow youth, who, after two years' training, were pronounced fully equipped for responsible positions in business houses. To these raw scholars Mr. Carnegie addressed himself in a bright, loose, desultory

fashion. He made a severe and unwise attack upon university training, and lauded the youth before him as thoroughly fitted for life's battles. Mr. Carnegie is a very smart, rich and philanthropic man. But, in attacking the higher education, he showed the poorest judgment. It is very easy for such a self-made man to erect a man of straw and knock it down to the delight of the unthinking multitude. Burdette, — a little boyish man, with the air of a school-boy speaking his first piece — surpassed our expectations. He poured forth a stream of mingled wit and wisdom which all who heard will long remember. Each word told. There was an ease and exactness about every expression which witnessed to the most careful preparation. It would be hard to find a sharper contrast than was presented there between Andrew Carnegie the self-satisfied, twenty-five-millionaire and Robert Burdett, the gentle, wise, little humorist, who pricks our conceits and touches at will both the fountains of laughter and of tears.

CORRESPONDENCE.

Editor EDUCATION: — I confess that it was with very great surprise that I read what "Septuagenarian" says about married women not being permitted to teach in our public schools. Much may be pardoned to age. But that should not prevent one from lifting up the voice against injustice and oppression. Our best lady teachers are quite as likely as any other class to get married. Does the mere fact of marriage — the true state for man or woman — lessen her teaching capacity? Being married a woman seldom desires to continue teaching, or to re-enter the ranks, unless there are good reasons therefor, often approaching to a stern necessity. Shall she be debarred simply because she writes her name Mrs. rather than Miss? No! As I think of the excellent married teachers it has been my privilege to study under, I can hardly restrain some indignation as I repeat with added emphasis— No! There is plenty of room in the teaching fraternity for every young woman who is a heaven-born teacher. For each of those who are not a score of employments are now open, to every one for the woman who, after marriage, feels the necessity of reëntering the school-room.

FAIR PLAY.

This is an interesting subject, and we shall welcome further discussion of it. What is your opinion, reader?

Editor of EDUCATION: — Can you give me a word of wisdom regarding the merits of the different cyclopedias now so extensively advertised. The daily papers have taken up the sale of them and are

so vigorous in denouncing rival publications, that I confess I am unable to decide as to which is the best set for me to purchase. I want to buy a set for working purposes, for daily use, and one that my family may consult intelligently. What is the best family encyclopedia now in the market? F. C. DE G.

Boston, Dec. 1891.

There are several excellent ones in the market, and you cannot go very far amiss whichever you decide on. But unquestionably, the *Britannica* stands first. We should advise you, if possible, to get that. The Henry G. Allen reprint is a noble set of volumes — thirty in all, including five of American Supplement. We can sell you a new set of these choice volumes for only $1.25 per volume, cash. This is twenty-five cents per volume less than the price at which the Boston *Globe* is now selling a much inferior edition of the *Britannica*. If you wish to avail yourself of this offer write at once; it will soon be withdrawn.

Editor of EDUCATION :—I am chairman of the text-book committee of our school board and have to meet the representatives of the book publishing houses, and hear their recitals of the merits of their respective publications. I was elected to the board only a year ago on the text-book issue, the people of our town declaring that the books in use in the schools were of antiquated date, out of touch with modern methods, and they demanded a change. I was selected to make the change. After a year's struggle with the problem I am no nearer making or suggesting a change than I was the day I was elected. The reason for my indecision is this: So many books have been presented to me for examination, so many agents have visited me and talked the worth of their wares to me and have decried the wares of their opponents, that I am in a mighty maze, and confess I am totally unable to make the decision I was selected to make. I write you for light. Will not some of your readers who have had experience in selecting books for use in schools, give me a few pointers in this matter. If I do not decide soon I must tender my resignation, and I would like to serve my term out and satisfy my fellow townsmen. What I would like to know is, first, how shall I know what is really the best book on any given subject, and second, is the fact that a book has had and is still having an enormous sale and use a safe one to build on in deciding in its favor. I am a plain man and have had little experience with books, but I want our schools to have the very best that is to be had, and our townsmen believed I was the one to select those books.

Massachusetts. M. F. L.

[Perhaps some of the readers of EDUCATION can supply the information so evidently needed by M. F. L. He certainly needs light and help. We shall be glad to print any communication on this subject.]

Editor of EDUCATION:—Your correspondent, P., in the December number, preached an excellent short sermon on the value of training children in oral expression. The trouble with the sermon was that the preacher took the wrong text. He would not, of course, set up a straw man merely for the pleasure of knocking him down, to say nothing of a straw woman; but it is evident that he could not have read Miss Shute's article attentively, or he would have discovered that it was not an essay on oral expression, nor on the relative value of oral and written expression, nor even on the natural sequence of the two kinds of expression, but simply an essay on "Composition," and that the term was carefully defined and the scope of the essay limited. By all means let us have oral expression in abundance, and let it be based upon the regular lessons of the school; and, before the lessons are done, let the pupil's language be carefully criticised. But in due time let the pupil write. Let him learn to express his thoughts accurately and elegantly with his pen. Let this written expression, for a time, follow in the wake of familiar oral expression; but let the pupil finally be trained in written expression which will arouse both the imagination and the faculty of thought. Yes, let us have oral expression; and also written expression. But let us not assume that because a lady sticks to her text when writing on "Composition," she does not know the limitations to written work and the value of oral work. I quite agree with P. that teachers too often overlook the value of continual correct oral expression; I only insist that he shall not make a false assumption a pretext for the expression of his views. D.

FOREIGN NOTES.

Movements affecting Universities in Great Britain.—The application for a charter for a new university in London, to be called Albert University, is the outcome of efforts which have been in progress for at least a decade. In 1888, these efforts resulted in the appointment of a commission to consider evidence bearing upon the subject, a step, which in England, usually precedes important action in educational affairs.

The report of this commission is a mine of information and suggestion touching the subjects of university organization and operation.

The oft repeated declaration that London has no teaching university, is likely to produce, at least in the minds of Americans, a misconception of the scholastic resources of the great metropolis. Three types of of universities are familiar to the English mind: The German type which is an organic unit, and so far, is represented on British soil by the Scotch universities; the English type, consisting of federated colleges, each of which is represented in the university governing bodies, and lastly, what may be called the Jesuitical type, whose function is examining for degrees. This last named type has had its greatest development in France. London University is a conspicuous example. This type was thoroughly investigated by the Germans in the early years of the century, and was rejected in favor of a university with professional functions. In France, the type is gradually passing away, and in London, it is to be hard run by the new rival. But, although London does not possess a teaching university, it is by no means devoid of agencies for the highest kind of instruction.

The two colleges which are united in the new petition, lack only the powers to which they now aspire, viz., those of examining their own students for degrees and conferring degrees, to rank among institutions of the first order. These two colleges, i. e., Kings, and University, possess buildings and lands valued at half a million pounds. Their annual receipts exceed $150,000; their annual attendance of students is as great as that of Oxford University, while the role of their professors shows many distinguished names; notably on the scientific side, Burdon, Sanderson, Michael Foster, and Lankester. The Royal College of Science, of which Professor Huxley has long been dean, is a vigorous institution. Technical instruction is represented by the Central Institution and Finsbury Training College of the City and Guilds of London. The Inns of Court form a great law university specialized on British lines, and medical schools are adjuncts of the metropolitan hospitals. This assemblage of great teaching bodies in London gave rise to the movement for a new university, which was intended to develop a scheme for uniting these forces into an organic whole. How far the new university, if chartered, will realize this purpose remains to be seen. University and King's colleges form the nuclei; any medical school may be admitted which is recognized as efficient by any qualifying body under the medical acts, and other colleges may be included. The distinction between the new university and the examining body known as London University, is not yet clear, but it is understood that candidates for degrees in the former must have studied at least two years in one of the constituent schools, in other words, the proposed new university is a teaching corporation. It was announced some time ago, that the Privy Council had decided in favor of the petition; the project has still, however, to run the gauntlet of much opposition.

The London Society for the Extension of University Teaching has been specially urged to petition Parliament against granting the charter on the ground that the Scene ignores the university extension movement, and is on the face of it, inimical to the free development of higher education. In a review of the work of the Scottish universities commission, the London Times says: "The Scottish University Commissioners have now issued a considerable number of draft ordinances, which are at present undergoing a cross-fire of criticism from the University Courts, the Senates, and the General Councils of the different universities, and from the Press. The most important ordinances sent out down to the present time, are those dealing with graduation in arts, graduation in science, and regulations for examinations in all the universities and those dealing with graduation in medicine, and the institution of a faculty of music in the University of Edinburgh."

Physical Education in France. — Physical education is the watchword of a movement in France which may be said to date from 1867. The publication in that year of the work of M. de Laprade, "Education, Homicide," wherein he described the lycées and colleges as "convict prisons," raised the cry of alarm. The excitement was increased by the work of Dr. Rochard, formerly Inspector General of Health in the French marine. His practical experience gave special weight to the views which he advanced in *L' Education de nos Fils.*" According to these from five to seven hours daily should be given by boys to repose, games, and exercises, besides the usual hours given to sleep. He described the upper classes of the lycées as walking about the playgrounds listlessly like "peripatetic philosophers." Jules Simon, the leader of many educational reforms in France, once said, "I should forget my childhood if I had had one, but in college, lads are children only two days a week and for two hours a day besides." A practical illustration of a more rational system of training has been afforded in Paris since 1869 by a private school, Ecole Monge, founded by graduates of the Ecole Polytechnic. In this school everything has been done to encourage out-of-door sports and athletic exercises. In 1888 a committee was formed for the "promotion of physical exercises in education," through the efforts of M. Godard, the Director of the Ecole Monge. Five months later a second society, the "Ligne Nationale de l' Education Publique" was formed for the same purpose on a larger scale. This includes a large and increasing number of Rectors of *Académiés*, heads of lycées, colleges, préfets, and other officials. The university is, on the whole, favorable to the movement, M. Gréard, Vice-Rector of the Paris *Académie*, is a member of both associations. Among other reforms this League seeks to obtain an abridgment of the

hours of study and the allowance of sufficient time for exercise and play. The movement has recently secured a positive triumph in the fact that at a recent competitive exercise (Concours général) of lycées and colleges, the highest honors were carried off by the institutions which are most fully committed to its measures. As regards formal gymnastics these have been included in the official programmes for primary schools, since 1850. They figured at first as optional subjects. In 1851 they were made obligatory in the normal schools, and in 1854 the same in the lycées. A sweeping act of 1880 made gymnastics compulsory in all public or state schools. In the primary schools the law calls for a lesson or exercise every other day in the week, practically, however, the requirement is seldom met. The chief difficulty in putting the law into operation in the elementary schools arises from the lack of apparatus. This is overcome in some large towns by establishing gymnasia at convenient centres. In the lycées the good effects of the exercise are counteracted by the rigid routine observed. These difficulties of detail are, however, carefully observed, and the obvious tendency is toward their correction. The principal lycées of Paris are following the lead of the Ecole Monge. Some make use of the Jardin de Luxemburg or resort to the suburbs of the city two or three times a week for recreation. The Minister of Public Instruction has granted the use of the gardens of the Tuileries for the same purpose.

MISCELLANEOUS NOTES.

Cambridge University congregation rejected the "Grace" for a syndicate to consider the proposition to allow alternatives for the classical languages in the previous examination as noted in the last number of EDUCATION. The vote which was taken October 29, stood 525 against and 185 in favor. The majority is much larger than was recorded against a similar proposition some two or three years ago.

Mr. G. J. Romanes, the eminent scientist, has presented to Oxford University an annual sum of £25 for a lecture to be delivered annually on some subject approved by the vice-chancellor, relating to science, art, or literature. It is analogous to the Rede lectureship at Cambridge.

The death is announced of the Rev. Dr. Evan Evans, Master o Pembroke college, Oxford, and after the Dean of Christ Church, the oldest of the Oxford heads.

The school board elections which have excited England during the last three months acquire peculiar importance from the new aspect which the free school act imparts to the system of education. The

results in London are not known at the date of this writing. In Birmingham the Liberals have gained a great victory in the most hotly contested election that has occurred since 1873. The advocates of denominational schools took the fight into the homes of the people, clergymen, Bible women and lady patronesses visiting from house to house with the startling inquiry, "Are you for or against the Bible?" In spite of these tactics, thanks to the intelligent stand taken by the mass of artisans, all the Liberal candidates were elected.

The success of the instructional kitchen started some years ago at Aldershot, under General Sir Arthur Herbert, has been so great that the provision of army cooking schools has been extended to the whole Aldershot division of the British army. The motto adopted for the first school was "Skim, simmer, and scour," which expresses the three cardinal principles of good cooking.

By the will of the late Richard Berridge £200,000 ($1,000,000) were bequeathed for educational purposes, one-fourth of which amount or ($250,000) is to be employed exclusively in the teaching of cookery in voluntary schools in England and Wales.

The partial triumph of the Liberal party in the recent elections in Holland has a significance in respect to education. The King's speech at the opening of the legislature contains assurance of special support for industrial and technical (i. e., professional) schools.

The special provision for maintaining the salaries of teachers in Belgium who are temporarily deprived of positions by party influences, or disabled by sickness, has led to many abuses. A special investigation has recently been made into this matter, and as a result of the report submitted, the king has issued a decree defining strictly, the conditions under which the provision shall be available.

Prince Damrong, of Siam, brother of the reigning king, has been placed at the head of the educational affairs of the kingdom, and in preparation for the duties of the position is now on an educational tour in Europe. He is described as a very intelligent, accomplished gentleman. He reports that in the government schools 2,500 boys are under instruction, and in the schools of the temples 50,000. As there are 5,000 temples in Siam this makes only an average of ten boys for each temple. Prince Damrong favors free education for his kingdom, but is of the opinion that the time has not come for making it compulsory. The department of which the prince is the head includes also public health and charity.

The University of Toronto rejoices in the recent gift of $20,000, the annual income of which is to be applied to junior matriculation scholarships.

Agricultural education is making great strides in France. The central school, formerly Institute Agromique, which has been reconstructed by the present Republic, and called now L' Ecole Polytechnique de l'agriculture is very vigorous. It numbers two hundred and seventy-five pupils, including representatives of nearly every European country. The garden of the Versailles Palace has become a horticultural school, where sixty pupils receive complete instruction in all branches of gardening and the culture of fruit and other trees. All the national schools of agriculture are equipped with fine laboratories. Before 1848, the money appropriated for this branch of instruction averaged $55,000 annually; it has now reached the amount of $800,000.

The Schoolmaster (London) is doing its best to explode the idea that elementary school masters find no place in public affairs. In late issues it traces the public services of two masters, one of whom, Mr. Ridyard, has just finished a most successful term as Mayor of Stalybridge, and the second, Mr. Burn, is just entering upon the duties of that office at Stockton-on-Tees. A. T. S.

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned.

Anciens rapports de l' Amazonas avec l' Asie. J. Barbosa Rodrigues. *Rev. de Geog.*, November. The writer describes stone amulets, *le muyrakytà*, he has found among the people in different parts of Brazil, composed of a mineral not native to Brazil, in forms like the amulets of Asiatic peoples. His conclusion is, that the aborigines of the Amazon are descendants of Mongolian Tartars.

Biblical Archæology and the Higher Criticism. Professor Sayce. *Expository Times*, December. "The reaction against the sceptical school in Grecian history produced by the discoveries of Schliemann and other archæologists, is now beginning to be felt in Biblical studies as well.—The evidence of material objects of architectural remains, of pottery and metal work, is more convincing than the most ingenious arguments of the "higher" critic and the most plausible theories of the scholar.—But the archæological evidence which dissipated the scepticism of the critics in regard to the older history of Israel has confirmed the doubts they have cast on the historical character of the narratives in Daniel."

Bowdoin College. C. L. Slattery. *New England Magazine*, December. Illustrated article, containing portraits

of President Hyde, Governor Chamberlain, Professor Cleveland and others, and reminiscences of Longfellow, Hawthorne, and Harriet Beecher Stowe.

Child-Life, Need School be a blight to? Dr. J. M. Rice. *Forum*, Dec. The writer describes two schools he visited; "One of these is a school of Germany, where education is recognized among the sciences; and the other a public school of New York city, a school belonging to a system conducted by laymen, thus proving that education is not recognized as a science in that city." The unique feature of the German school was the peripatetic lesson.

Child, The story of a. James Sully. *Longman's*, December. An account of *Le Roman d'un Enfant*, by Pierre Loti. "The remembered impressions of the first years, penned by one who has now a high place among contemporary French writers; a quiet childhood filled with reverie. — One often wonders why little incidents, momentary pictures, should linger in the memory when all else is lost in the darkness. M. Loti suggests that it is the welling up of new childish emotion, the agitation of the whole organism by a sudden expansion of sensibility, which causes the image of the moment to penetrate into the very texture of the mind, never to be dislodged.

Classification of Education. K. A. Linderfelt and C. A. Cutter. *Library Journal*, November. Showing library methods of classifying books on education.

Education in the Army. W. H. Powell. *United Service*, December. Complains that army posts are generally far away from school opportunities; both the soldiers and the children of the officers are losers. The teaching for the soldiers is by soldiers, who generally have not even a high school education. The children must be sent away from home; their irregular schooling accounts for failures of sons of army officers to graduate, and of some even to enter the military academy. The writer asks for a system of education with uniform text-books throughout the army.

Education, Thoughts about. Frederick Harrison. *Forum*, December. "Many things work delightfully for good whilst they are spontaneous and unorganized; but when they are stereotyped into an elaborate art, and evolve a special profession or trade of experts, they produce unexpected failures, and end in more harm than good. There is no test of a good education, and no specific for making a young mind active and full.—The normal and noble education can only be given in families, and not in barracks and convents.— After the mechanical rudiments, after the age of fifteen, what is needed is guidance and inspiration, not hammering, and cramming, and punishing."

German Newspaper Press. Charles Lowe. *Nineteenth Century*, Dec. Explanation of the great predominance of the Jews in Germany, — "it is not altogether that the Jew is a cleverer and shrewder man than the German; but the best brain and brawn of the German nation is now absorbed into the various services of the State, especially the army, and the Hebrews have it all their own way in the money-making and power-acquiring walks of life. The Jews have practically acquired a monopoly of all the bourses of Germany, all the theatres, and all the press. There is no such thing as modern German literature, but there is a Jewish literature written in the German language. A great deal of the 'Press opinion,' which is telegraphed to London or other capitals as 'German' is only Jewish."

Guerra, l' abolizione della, come effetto della trasformazione della lotta per l'esistenza. Guiseppe D'Aguanno. *Riv. di filos. scient.** Sept. War is a necessity for healthy life and development of organisms, of human society as well as of plants and animals. Ancient wars often contributed to advancement of civilization. The struggle for existence must go on, but may become less bloody and more intellectual. "Let us leave to the sentimentalist all vain complaints of the sad lot of human nature. The conditions should be studied, that the struggle be kept from going beyond bounds, from violence and deception, that for the future the palm may be reserved to genius and virtue."

Herodas [or Heroudas], The "Mimes" of. C. Whibley, *Nineteenth Century*, Nov., and A. Lang, *Contemporary*, Dec. Description of this newly discovered Greek work, with extracts. Comic dramas, in colloquial form, very close to common life of the Greeks. One of the mimes

is "The Schoolmaster"; a mother brings her bad boy to a schoolmaster, to be flogged, for refusing to write and for keeping low company. "Not content with knucklebones, he is ruining his family by his excesses at pitch and toss with coppers. The master flogs the boy, who swears 'by the dear Muses' to be good in future."

London Poverty, A picture of. *London Quarterly Review*, October. A review of Labor and Life of the People, edited by Charles Booth. "Poverty is constantly intensified by the not sufficiently discriminate and sometimes excessive relief administered from public and from private funds. The competition of the various religious sects for these poor people conduces to their shiftlessness and confirms them in their unthrifty ways. The free meal every schoolday, given to all who, on the score of need, put in their claim, simply reduces by so much the minimum cost, and therefore, the minimum wage, at which family life is possible. It means liberty to add with impunity fresh units to the helpless and unwieldy mass already hanging like a millstone around the necks of the thrifty poor."

Mental Statistics, A study in. Joseph Jastrow. *New Review*, Dec. He asked his class in psychology to write out at their leisure 100 words as rapidly as possible, and to record the time. Papers of twenty-five male and twenty-five female students compared. Comments on them as to (a) community of ideas and thought-habits; (b) the nature of the more usual types of association; (c) the time relations of these processes. Of the 5,000, only 2,024 different words; the remaining 2,976 are repetitions of 758 words. The repetitions in names of articles of apparel, of interior furnishings, preponderate with the women, but they have a much larger number of such words altogether; similarly the men have more repetitions in the names of animals and mention more such names. Of the 308 seconds, the average time occupied in writing 100 words, 210 seconds are spent in the act of writing, 114 seconds in thinking of what to write, and sixteen seconds in which both are done."

Mud. *Cornhill*, December. "The most valuable mineral on earth is mud. The only parts of the world that count much for human habitation are the mud deposits of the great rivers. England is fed from foreign mud fields."

Naming of our forefathers. W. Wheater. *Gentleman's Magazine*, Dec. "The methods of the Red Indian prevailed in England in the days of the Plantagenets. Our forefathers of the non-territorial grade owed their cognomina to the most diversified of incidents; incidents of change and decay, of servitude and degradation, of mirth and laughter, of savage irony and mocking jest."

Polnischer Poesie, Der Geist der neuern. B. G. *Unsere Zeit*, Heft 11. The Poles had their classic renaissance in the sixteenth century, their national in the nineteenth. The flower of their national poetry was brought forth by the loss of their independence. National despair and religious hope characterize this Polish poetry. Chopin was one of their greatest poetic spirits.

Preventive medicine. Armand Ruffer. *Nineteenth Century*, December. A historical sketch of the progress of bacteriology; increasing number of diseases prevented or cured by some kind of vaccination. As to the sentimental prejudice against vivisection, the writer says, that "those who expect that the science of medicine will make any startling progress without having recourse to experiments on animals, might just as well expect to see brilliant discoveries in chemistry without new and important methods of chemical experimentation."

Prison, The palimpsests of. Helen Zimmern. *New Review*, December. On Lombroso's collection of inscriptions and drawings made by prisoners in their cells. They show no repentance or shame. The subject of their crime often described, and even pictured. These writings often evince education, but moral idiocy.

Reasoner, Is man the only? James Sully. *Nineteenth Century*. November. "The evidence on the whole supports the view that the generalizing process is up to a certain and not very high point independent of language. The addition of some kind of sign which can be used as a mark of common features or qualities seems to be indispensable to any high degree of generalization, and to any elaborate process of reasoning. It is the want of such signs and not the lack of the 'power of abstraction' that keeps certain animals, for example, the dog,

from being rational animals in as complete a sense as a large number of our own species."

Safe deposit company, The evolution of the. T. L. James. *Cosmopolitan*, Nov. "The whole development of receptacles for securing has simply kept pace with the inventions of thieves for breaking into the places where valuables are kept."

School question. Dr. Bouquillon and the. *Catholic World*, Dec. He allows large scope for state authority over education, as to results, but not the right to force anyone to a certain determined school. "The domicile among us of so many millions of Europeans certainly introduces another factor into the problem. If a system or grouping of schools should undertake to teach imperialism or anarchism, or should prohibit the use of the common and official language of the state, the wildest Jeffersonian would claim for the state the right of interference."

Type-setting machines. P. D. Ross. *Pop. Sci. Monthly*, December. "While nothing in the world has developed more marvellously than the printing press, in type-setting by hand, civilization is to-day where it was three hundred years ago." Descriptions and figures of the Mergenthaler or Linotype and the Rogers or Typograph machines are given. At their best, they can do as much as four good compositors; but they are practicable only in large establishments and in cities.

Witchcraft in Scotland. F. Legge. *Scottish Review*, October. After an account of the witch persecutions, as related by Scott and Lecky, the writer considers the problem presented by the almost simultaneous occurrence of witch trials throughout Europe. "Why did the desire to hunt out and ill-treat witches choose the fifteenth century for its outbreak? And why did it cease almost as suddenly as it began, about a hundred years later? — later in Scotland than on the Continent, because it came there later. Perhaps the panic which gave rise to it was one of those unreasoning impulses — like that which set on foot the Crusades of the eleventh, and the Gambling mania of the last centuries — to which the nations of Europe seem to be periodically subject. It was science, rather than rationalism or humanity, which brought about the downfall of the belief in witchcraft, and it is well that it was so; for science never gives back the territory she has gained."

Women, Higher education of. Dr. Mary Putnam Jacobi. *Science*, Nov. 27. "All the voluminous literature that has been written on the dangers of 'co-education' for girls really applies to gregarious education with members of their own sex. A girl placed in an army of her fellows is in a position peculiarly foreign to her nature, which demands an individual setting, a family life."

Women, The surplus of. * * * * *Westminster*, November. Census of England shows that women are in a great numerical preponderance, Result of this must be more competition among them, the factor essential to the development and survival of the fittest. "Marriage-manœuvres create an ignoble atmosphere, yet the industry, enterprise, and skill with which they are accomplished have brought out and developed feminine resources, physical and mental, which without this stimulus would have lain dormant and inert."

J. P.

AMONG THE BOOKS.

We hail with delight MASTERPIECES OF AMERICAN LITERATURE. This book was planned, and most wisely, by the supervisors of Boston "for use in the most advanced class of the grammar schools." And, on being brought to the attention of the school committee, it was unanimously adopted before publication as a text-book for reading in the first class of the grammar schools. Here is a book to warm every American heart. It fulfills its title, giving the choicest productions of our most gifted writers. Irving is represented by "Rip Van Winkle," Franklin by "Poor Richard's Almanac," and three letters to noted men, Hawthorne by "The Great Stone Face," and "My Visit to Niagara." Thoreau by "Wild Apples," Emerson by "Behavior," and "Boston Hymn," Webster by his first address at Bunker Hill, Everett by "The Character of Washington," Bryant by "Thanatopsis," and "To a Waterfowl," Holmes by "The Chambered Nautilus," and three other poems, Whittier by "Snow Bound," "The Shipbuilders," and "The Worship of Nature," O'Reilly by "The Pilgrim Fathers," Lowell by "Books and Libraries," "Essay on Lincoln,' and "Vision of Sir Launfal," and Longfellow by "Evangeline." A compact biography of each author adds much to the worth of the book. Published by Houghton, Mifflin & Co., Boston.

STAR-LAND is the pretty and very appropriate title of a volume of lectures, in the form of familiar talks with young people about the wonders of the heavens, by Sir Robert S. Ball, the Royal Astronomer of Ireland. These simple and delightfully instructive lectures were delivered, at Christmas-tide, 1887, at the Royal Institution of Great Britain. Very fortunate were those boys and girls who heard the great astronomer explain the heat of the sun, its distance from us, its shape, size, spots, eclipses, rotations, etc. Other subjects discussed were the moon, the inner planets (Mercury, Venus, and Mars), the giant planets (Jupiter, Saturn, Uranus, and Neptune), comets and shooting stars, and stars. Every boy and girl who carefully reads this book will have a new world opened before his or her astonished vision. It is well illustrated and written in a charming manner which will be easily understood. Ginn & Co., Boston.

BABYLAND for January is full of dainty pictures, sweet little stories and gay jingles from cover to cover. May it long continue to be a source of comfort and delight both to baby and mamma. In OUR LITTLE MEN AND WOMEN the pictures are bright, attractive, and pretty, the verses and rhymes, expressions of melody and sweetness, and the stories are made for boys and girls, by writers who know how to make them. OUR LITTLE MEN AND WOMEN is really, what it claims to be, a magazine for boys and girls of from five to nine years. The contents of the January PANSY will delight all its readers as well as help to create more. Its stories are characterized by that high moral tone which stamps this magazine as the young folks' friend, its sketches are graphic and real, its poems, pictures and verse replete with incident, interest and merit. We heartily recommend it to the family, the reading-room, and the home. The January

WIDE AWAKE contains a store of good things for young and old. It brings to its readers stories by Molly Elliot Seawell, G. Adams, Captain C. A. Curtis, and others. It has sketches by Amanda B. Harris, Lieut.-Col. Thorndike, Harriet Maxwell-Converse, Zitella Cocke, Otis T. Mason, and Sallie Joy White. It has poems by Celia Thaxter, Clara Doty Bates, and others. It has pictures by L. J. Brigman, George Foster Barnes, Childe Hassam, E. H. Garrett, etc. Such a combination of talent in story-tellers, verse-makers, and artists should produce most interesting reading matter, and one needs but to glance over these attractive pages to find the promise fully carried out. WIDE AWAKE is 20 cents per number; $2.40 per year. D. Lothrop Co., of Boston, are the publishers of all these magazines. A discount of 25 per cent on any of these magazines to subscribers to EDUCATION who send their money to Publisher EDUCATION.

Do you want to read a bright, crisp, helpful, little book? Do you want to write for the papers, but feel the need of wise advice? Then get a copy of TO WRITE OR NOT TO WRITE, by Alice R. Mylene, and study it. It is not the work of one but of many. The brightest of the successful writers of the day of both sexes have been as it were buttonholed and made to tell of the roads they travelled to reach the delightful mountain summits of success. The advice which such authors as Colonel Higginson, Hezekiah Butterworth, W. D. Howells, George William Curtis, Edward W. Bok, Oscar Fay Adams, A. Curtis Bond, Tom Masson, Mrs. Frank Leslie, Ella Wheeler Wilcox, Abby Morton Diaz, Margaret Deland, Cora Stuart Wheeler, and twenty others here give to those aspiring to literary honors deserves the heartiest reception by all to whom it is addressed. Every teacher would profit by a careful perusal of these pages. Get a copy and see for yourself. Address: The Coöperative Literary Press, 59 A. Ames Building, Boston.

Professor Woodruff, of Bowdoin College, has prepared a good series of "EXERCISES IN GREEK PROSE COMPOSITION," based upon the Anabasis Books I.-III." It rests upon the accepted theory that the best way to attain clear mastery of forms and constructions is by practice in genuine composition. There is no vocabulary; hence the pupil must be familiar with prescribed portions of the Anabasis. Thus the book becomes a series of special reviews of the text. It is more and better than retranslation, for retranslation easily becomes a mere feat of memory. It is every way superior to a composition book which is a companion to the grammar only, and not to text and grammar too. The notes and indexes are very good. The progressive character of the exercises is well sustained. The modest preface makes acknowledgement of assistance to M. Grant Daniell and Dr. Robert P. Keep, and more particularly to Professor Little of Bowdoin, and Professor Coy of Phillips Academy, Andover. Professor Woodruff has been a skilful teacher of Greek in graduate and under-graduate classes. Messrs. Daniell, Keep, and Coy are experts in preparatory work and authorship. The publishers, Messrs. Leach, Shewell, and Sanborn, have made the book very attractive. Pages 123, cloth, 75 cents.

MUSIC is the appropriate title of a substantial, new magazine which made its appearance in Chicago, in November. It is edited and published by W. S. B. Mathews, and is filled with choice articles which will delight and instruct all lovers of good music. A dozen strong articles and illustrations of Mme.

Albani, Wagner, and others, make the December number one of great worth. We give MUSIC a cordial welcome.

L. Prang & Co. add their full share to the joyous Christmas time. They deserve and receive the hearty thanks of an ever increasing multitude for the brightness and beauty they are bringing into our lives. This year there are lovely Christmas and New Year Cards, dainty art novelties, and calendars of many sizes and very pretty designs; then there are Fine Art Pictures on paper and satin, Art Books and Booklets, with much exquisite hand painting. Here a TENNIS SET, by Lucie A. Harlow, gives, in a humorous way, the outcome of a charming flirtation carried on while playing at tennis. It is charmingly illustrated by F. Schuyler Mathews. The cover shows a realistic tennis net. There the same artist has illustrated another humorous poem by the same author, called A DAY'S FISHING, it is a shape-book, and is fastened in a cover of realistic sportsman's fishing-basket. Among other shape-books are: CHRISTMAS SALAD, after Sydney Smith, with illustrations by Lizzie K. Harlow, describing the ingredients of an excellent salad, fastened in a cover of realistic lettuce-leaf; THE OLD FARM GATE, by Lurabel Harlow, with illustrations in color and monochrome by Louis K. Harlow, fastened in a cover in shape of an old farm gate; and BONNETS AND HATS, exquisitely portrayed from Youth to Age, by Mrs. Mary H. Huntington, with illustrations by Helen A. Goodwin. These are all very cute. But they are only a few of the great variety which this firm offers to every lover of sweet and beautiful things.

Each bound volume of the CENTURY contains a large amount of varied, interesting and exceedingly valuable matter, and often by authors of brilliant and wide reputation. The last volume, May — October inclusive, is a thick book of 960 pages. Such names as George Kennan, Frank R. Stockton, Seth Low, Henry Cabot Lodge, Edward Eggleston, Brander Matthews, Mrs. Burton Harrison, Louise Chandler Moulton, and Amelia Gere Mason, are enough to assure the most captious and critical that here is a feast of fat things. It touches all the varied interests of life to please and instruct. The illustrations are numerous and choice. Price in gold cloth, with gilt tops, $3.00. The Century Co., New York.

The Century Co. also send out the bound volumes of ST. NICHOLAS for 1890–'91. In these two admirable books, every boy and girl may find delightful friends. Such writers as J. T. Trowbridge, Noah Brooks, John Burroughs, Mary Mapes Dodge, Mary E. Wilkins, Josephine Pollard, Sophie Swett, Nora Perry, and Celia Thaxter, know just how to reach the youthful mind. These books, full to the brim with good stories, adventures, poems and instructive papers, ought to be read by all the youth of the land. It is needless to say that they are beautifully illustrated. The price is $2.00 per volume.

Heath's Modern Language Series has grown to be one of the finest collections of annotated literature before the public. Every addition adds weight to its worth, and makes pleasant the path of the student. Two volumes have been recently added, one is Victor Hugo's HERNANI, edited with introduction, and critical and explanatory notes, by John E. Matzke, Ph. D. The text is most carefully compared with the original, and the notes are of the kind that

suggest rather than furnish help; they develop the self-activity of the student. The other volume is styled an INTRODUCTION TO MODERN FRENCH LYRICS, and is edited, with notes, by B. L. Bowen, Ph. D. The object of this volume is to furnish students in French with material for an introductory study of lyric poetry, and for this purpose a selection has been made of a number of well-known and characteristic poems. The famous revolutionary and national songs are given, and choice poems from Beranger, Lamartine, Victor Hugo, Alfred de Musset, Theophile Gautier, and others. A valuable addition is a chapter on French versification. Published by D. C. Heath & Co.

Hartvig Nissen, Instructor of Physical Training in the Public Schools of Boston, has prepared what he styles the A B C OF THE SWEDISH SYSTEM OF EDUCATIONAL GYMNASTICS. It is an attempt to simplify the system now so popular in European countries, and freeing it from its technicalities, make it plain and comprehensible to both teachers and pupils. Days' orders are arranged for every grade of schools from the primary to the most advanced, and abundant illustrations serve to make clear every new order. Teachers will welcome this little work and find it a valuable aid in their teaching. Published by F. A. Davis, Philadelphia.

PREPARING TO READ; or the Beginning of School Life, is the title of Mary A. Spear's little book. The author is principal of the Model School, State Normal School, West Chester, Pa., and writes her experience in teaching beginners in the primary school. Most explicit directions are given for starting the work aright, and the value of the blackboard in this is clearly demonstrated. Mr. R. D. Augsburg contributes over three hundred drawings to the volume, and these are designed to aid the teacher in developing the reading lesson. The book is a suggestive one to all primary teachers. Published by the New England Publishing Company, Boston.

From C. W. Bardeen, Syracuse, N. Y., we have received the following: DR. PICK'S FRENCH METHOD, by which method the student of French acquires a knowledge of the language through the memory scheme, invented by Dr. Pick. It has the merit of novelty combined with simplicity, and we do not see how it could fail to furnish the student with a good working knowledge of French. ELEMENTARY ENGLISH, by John D. Wilson, a little book prepared with reference to the Regent's examinations in the State of New York. It contains many valuable suggestions, and the skeleton of all that is essential in English. The INTERNATIONAL DATE LINE, by Henry Collins. This is a new edition, revised by Mr. Bardeen, and presents the subject in a lucid and cogent manner. THOUGHTS FROM EARNEST WOMEN, arranged by the Women's Literary Club, Dunkirk, N. Y. The thirty-six pages of the pamphlet is crowded with the best thoughts from the most famous women. The thoughts breathe of vigorous intellects and wholesome hearts, and are gems which the world will ever prize.

Mr. L. W. Russell has prepared a little work entitled NATIVE TREES, in which he tells of maples, birches, oaks, and chestnuts as he saw them in his walks in town and country. It is written in a style to suit the home or the school, and will be a welcome book in both places. Published by the New England Publishing Co., Boston.

From the Boston School Supply Co. comes INFORMATION READER, No. 2; treating of every day occupations, such as silk culture and weaving, cotton growing, wool carding, cloth, and carpet, and lace weaving, hat making, tanning. pottery making, house building, etc., etc. The book is replete with useful information, and will be a valuable adjunct in developing the powers of observation in children while giving them knowledge of those occupations with which they are most familiar.

Dr. James Baldwin, in his INDUSTRIAL PRIMARY ARITHMETIC (Ginn & Co.), endeavors to show how numbers may be taught to little ones in an intelligent and natural way. Every number is taken up and considered, and every possible combination is made whereby the learner may grasp it and retain its value. The pupil is thrown on his own resources, and he learns by doing and making. It is one of the best manuals on primary arithmetic we have examined, and if its plans and methods are carried out by teachers, there must result a more thorough grounding in the fundamental rules.

Much, very much, in little may be said to characterize Prof. J. H. Gilmore's OUTLINES OF RHETORIC. Every essential has been preserved and, stripped of verbiage, is made to illuminate the subject of rhetoric. The part for the student to memorize is reduced to the minimum, and the supply of material which the student can subsequently use is raised to the maximum. No better, clearer, more scientific, forceful book on rhetoric has been made in these later years. It is essentially a text-book, but one that need not find its sole employment in the class-room. It should lie within easy reach of every speaker and writer. Published by Leach, Shewell & Sanborn, Boston.

ALL AROUND THE YEAR is a sweet, dainty little calendar for 1892, by J. Pauline Sunter. Here are lovely child faces and a monthly almanac. Gilt edges, thick paper, fringed white cord, rings and a chain add to its attractiveness. Lee & Shepard, Boston.

The same firm brings out a little book by the well-known author, Samuel Adams Drake, on THE BATTLE OF GETTYSBURG. It is a vivid picture, in language at times somewhat overdrawn, of the topography of the battle-field and of the generals and troops who there met each other in a terrible three-days' death grapple. He finds it easy to criticise the disposition of troops and the generalship on both sides. But the bravery of the soldiers of both armies receives, as it deserves, unstinted praise. Gettysburg was certainly one of the "decisive events in American history."

A herculean task was that which Tryon Edwards, D. D., set before himself, long ago. But forty years of patient research and steadfast purpose has enabled him to carry it out, and the result is seen in a massive volume called A DICTIONARY OF THOUGHTS. Here are 644 large, double-column pages packed with laconic quotations from over sixteen hundred ancient and modern authors. As the type is small, the amount of matter is very great. It is, indeed, a cyclopædia of quotations, alphabetically arranged by subjects. A great many people will enjoy what Doctor Edwards has so diligently compiled. He has placed his name in the list of those, each of whom Johnson calls "a benefactor of mankind who condenses the great thoughts and rules of life into short sen-

tences that are easily impressed on the memory and recur promptly to the mind." There is a great deal that is valuable in such a vast collection as this, while there is not a little that is goody-goody or mere chaff. As the number of quotations averages about ten to each author, it is really surprising to see with what frequent regularity quotations appear from the rather obscure author, Tryon Edwards — the compiler of this work. Of course, he knows how high a place he deserves among these worthies. The book is published by Cassell & Co. of New York.

Mr. Julian Hawthorne makes his living with his pen, and writes as the call from the family needs is heard. He is a novelist by choice, but he can turn his versatile pen upon any theme which promises remunerative returns. His very latest pen-work has been upon a school book, and he has produced a volume of 320 pages under the title of AMERICAN LITERATURE, An Elementary Text-book for use in High Schools and Academies. In the preparation of the book he has associated with him Mr. Leonard Lemmon, superintendent of city schools, Sherman, Texas. The preface tells us that there is no satisfactory work extant on American Literature, none adequate to the needs of our schools, and it is the purpose of the authors to give the rising generation an adequate notion of what American Letters really is. The authors further state that in the matter of passing critical judgments upon literary work, they have followed their independent convictions, and for this we are duly grateful and made extremely wary in accepting their conclusions. The most painful evidence of the prentice hands of the authors is found in their arrangement of periods, and in the selection of typical authors of these periods. To the teacher of literature, there will come a strong sense of the unfitness of the authors of this book for their work, apart from the value that may be placed upon their critical acumen and judgment. In a work of this kind, personal bias should have no consideration, yet, there is evidence, all through the book, that the favorite writers of these authors have been given undue prominence, to the almost exclusion of others whose claims to recognition and exposition were fully as strong. To instance, more than fourteen pages are given to Poe, and less than a page to Willis. To Prescott is given one page, and Ticknor is dismissed with three lines. Margaret Fuller has three pages, while Sumner and Wendell Phillips are both considered on one page. An entire chapter is devoted to Nathaniel Hawthorne, while four pages suffice for Oliver Wendell Holmes, four to James Russell Lowell, and three and one-half to Whittier. It is needless to multiply instances, those given are samples of what the book contains. The novelists are preferred to the historians, the lighter poets to the essayists, and the personal factor dominates all. In the critical estimate of the productions of the writers considered, there is shown a departure from the beaten tracks that is refreshing, even if it is not always accurate. There is a charm in the style and a purity in the diction that will go far to redeem the one-sidedness of the judgment given of the writers that have made and are now making literature that is distinctly American. Mr. Hawthorne thinks firmly and writes fearlessly, and for his candor there is due him a meed of praise. We could wish, however, that he had trusted less to his own inclination and personal predelections before placing an estimate upon an author's place in the realm of Letters. Published by D. C. Heath & Co.

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SCHOOL DISCIPLINE.

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I.

AIMS AND PRINCIPLES.

INSTRUCTION and discipline are like the two blades of a pair of scissors, or like the upper and the nether millstones; neither will work well alone. One blade will not cut, and one stone will not grind; so neither instruction nor discipline alone will fashion and subdue the unformed and obstinate mind of youth. The effectiveness of either depends upon its union with the other. But as one blade may be ground at a time, and one stone hammered at a time, so either instruction or discipline may be discussed apart from the other, and thus be made more effective for the incisive and subduing work of the school-room. This is my reason for directing special attention at the present time to the subject of school discipline.

A complete theoretical view of this subject involves clear ideas and opinions upon four points: 1. The aim or purpose of school discipline; 2. The principles according to which it can be made effective; 3. The methods by which it is to be directed; and, 4. The means by which it is to be enforced.

The aim of school discipline should be twofold, immediate and remote. The immediate aim is that state of quietness and order which is necessary for the effective conduct of the work of the

school. The remote aim is the creation of those habits of industry, helpfulness, benevolence and self-control which constitute the elements of manly character.

We are apt to be too well satisfied if the immediate aim alone is secured. The old-fashioned schoolmaster used to boast that the order in his school was so good that one could hear a pin drop. But a very little reflection will convince us that dropping pins is but a small part of the duties of life, or even of the school-room, and that we are called upon still less to spend our time in listening for the sound of pins when they happen to be dropped. The old schoolmaster left out of sight the remote aim of discipline, and in considering the immediate aim he mistook the means for the end. It should never be forgotten that the quiet of the school-room is only a necessary means to an indispensable end, and never an end in itself.

It is quite possible for a school to be too quiet. All unnecessary quietness that is attained through positive pain of the pupils is excessive. All quietness that is secured at the expense of what is more valuable is too costly. An awkward gait, fixed for life by walking on tiptoe to avoid the noise caused by touching the heels to the floor, is too great an infliction to impose upon a child for the sake of a slightly higher degree of stillness in the school-room. Men have heels as well as toes, and they walk more gracefully and firmly by using both; hence, children should be allowed to walk on both, and thus walk in school as they ought to walk out of school. Life is too short to teach men and women to move with the precision and noiselessness of well regulated machines; hence children should not be drilled in moving with machine-like exactness and silence. There is a certain amount of rub and rattle and bustle and clatter, incident to the use of pens, pencils, slates and books, which the wise teacher will do well to allow and not attempt to suppress. Let all needed movements in the school-room be made in the same way, with the same degree of rapidity, and with the same amount of noise, that would be proper out of the school-room. Death-like silence and arbitrary repression are as destructive of moral and intellectual growth in the school as in the family.

But a sharp distinction is to be made between the necessary noise of earnest industry and the willful confusion resulting from unrestrained mischief. While necessary noise is to be cheerfully

allowed, unnecessary noise is to be avoided. No pupil is to do what will disturb and distract the attention of the others. During the time for quiet work no pupil is to move about the room, raise his hand, ask a question, offer a suggestion, or do anything else which will interrupt the progress of the class. The asking and answering of a single question in the midst of the solution of a problem by a class usually wastes an aggregate of from two to ten hours of time. The teacher should be sure to make all needed explanations, give all necessary directions, and see that due preparation has been made by all the pupils, before the work begins; but when the time for class work has come, he should allow nothing to be done but the work assigned. Interruption by a pupil is to be regarded as a misdemeanor. It is better to allow a pupil to lose half an hour of his own time than to permit him to waste ten hours of the time of the class.

One other thing needs to be said in this connection. The teacher himself should not become a nuisance during the study hour. If he has done his preparatory work properly, the best service he can render the class during the time devoted to study is to sit down, and, in stillness and silence, see that every pupil attends to the work assigned. Nothing is more disturbing to a class, and few things are more irritating to studious pupils than the incessant interruptions and the everlasting prattle of a loquacious teacher. The interruption of a pupil's train of thought is just as harmful when made by a teacher as when made by another pupil. There are times in every well regulated school when universal quiet and silence are of priceless value, and when speech, whether by pupil or teacher, is a crime. Study plays too small a part in the modern school. It should not be harmed by act or word. By all means, learn to preserve inviolate the sacred silence of the study hour.

Another condition of good work in school is a certain amount of uniformity of action on the part of the pupils. Regularity and punctuality in attendance are essential to the best progress; and of not much less importance is regularity in leaving at noon and at night. The reflex influence, both upon pupils and teacher, of detaining pupils after school is an almost unmitigated evil. The pupil who expects to remain after his friends have gone will usually try to extract as much pleasure as possible out of their companionship while they do stay. Detention of pupils generally

sends them away with feelings of malice toward the teacher, and often with a determination to make up the lost time at the next session; and then it unfits the teacher for his best work the next day.

There are times when the pupils must all read together, write together, sing together; and so on to the end of the chapter; otherwise confusion arises and progress is impossible. Hence there must be one controlling mind in every school-room. The authority of the teacher must be supreme. Instantaneous obedience must be insisted upon. Pupils must not only do what they are told to do, but they must act when they are told, and continue to act as long as the teacher directs. The discipline of many a school is destroyed because the pupils do not all obey instantly. The teacher gives a command, and some of the pupils do not obey. He then begins to issue personal invitations to obey the command. I have thought that some teachers would save time and voice by having cards printed containing special requests to the recipients to obey the directions which have just been given to all the members of the class. I recollect reading, a good many years ago, an anecdote of a Greek general, who, when his son asked him at what hour the army would march, replied, "Are you afraid that you alone shall not hear the trumpet?" This old Greek had the true idea of discipline, namely, that a command to all is a command to each; and that the time to move is when the commander directs.

There are certain uniform movements in writing, drawing, and gymnastics, which must be followed by all in order for reasonable progress to be made, or even for the instruction to be given. Time spent in teaching children the angle at which a slate pencil must be held to avoid creaking, or in showing them how to hold the pen so that it will not scatter the ink, or how to walk so as not to scuff is time well spent. It not only avoids confusion, but makes possible the needed quiet of the schoolroom.

Does the question arise: What shall be done with those members of the class who finish their assigned work sooner than the rest? To this question there are two answers. As a rule, so assign work that each pupil will have all the work that he can do in the allotted time. A difficult problem at the end of the lesson may often hold a bright lad to the end of the hour. Bear in mind, too, that repetition is an essential element in the acquisition

of skill, or in learning so that the result will be available for all time. But there are cases for which special provision must be made. If a pupil has marked ability in any particular study, so that he can do all you want him to do on a particular lesson sooner than the rest of the class, arrange beforehand for the use of his spare time. If he is a fine mathematician and a poor speller, give him work in spelling to fill up the unused part of the arithmetic hour; and have it understood that when his arithmetical work is finished he is to begin the work on spelling immediately without admonition from the teacher, or disturbance of the class. Let similar provision be made for every pupil of exceptional ability in any direction.

The attainment of the immediate aim of discipline requires that there be no skulkers, no laggards, no guerrillas, no independents, in the ranks; but that all move according to the commands of the teacher, instantly, uniformly, quietly; and that all keep moving straight on till ordered to halt or to change direction. If this state of action is secured and maintained, no pupil will molest or disturb the others; and the school will be in that condition of order and quietness in which it is possible for the required work to be done effectively. This is the immediate object of school discipline. Its manifestation is outward, objective. All this is possible, however, without that subjective effect which I have called the remote end of discipline. In a word, it is possible to secure order and quiet in school without producing those lasting effects upon the pupils which constitute the elements of lofty human character.

What are the elements of character that should result from school discipline? It will help us in forming correct opinions on this point, if we note some of the traits that should not result from school life. The school should produce in its pupils nothing of shyness, insincerity, deception, meanness, selfishness, dishonesty, untruthfulness, or laziness. These, as well as all other vices, are developed by practice. Hence the discipline of the school must be so rigid, so orderly, so open, and so active, that none of these vices can exist. For example, the teacher must see to it that the day is so full of honest work that there is no time for indolence or sham. But to give a positive answer to our question, we may say that right habits of action should result from the discipline of the school. Among these habits may be included habits of bodily, of intellectual, of æsthetic, and of moral action.

A pupil should go out from the school with such habits of sitting, standing, walking, gesticulation, and speech as he ought to practise in polite society through life, so far as these habits would result from the doing of all that is required to be done in school in the best possible way. A stooping posture in sitting or standing, a shuffling gait in walking, the mouthing or clipping of words, and other bad habits of physical action should never result from the repetition of acts required or allowed in the school. The physical actions demanded in school should be such as will result in the habits of physical action that should be followed through life.

The same is true of intellectual, æsthetic, and moral habits of action. There is something wrong in the discipline of the school, when its pupils go through life with their eyes closed and their minds thoughtless. The result of school life should be habits of observation and thought. The student should take with him into active life a love of the beautiful and the good. He should be habitually obedient to all rightful authority, industrious, devoted to the good of others, a lover of learning, and fond of good books. His will should habitually be in subjection to the law of right and duty.

To sum up the whole matter in brief, school discipline considered in its relation to its remote, or secondary, aim is a branch of moral education. All discipline that fails of moral results is defective; it fails of its most important function. Good discipline secures good order; and it always does something more. It uses its opportunity so as to form those habits of physical, intellectual, and moral action which constitute the elements of a noble manhood. So much as to the aim of school discipline.

Let us next inquire what the principles are which should control its conduct. Of these I will mention but two. 1. Power to act is developed by acting. This is readily admitted in its application to the development of physical power; but it is often practically denied in its application to the development of spiritual power. We admit that action adds power to the blacksmith's arm, but we hesitate to believe that action increases the power to resist temptation. We too often act as though we believed we could develop the intellects of our children by our own intellectual action. How often we explain, when study by the pupils would be much more effective as a means of increasing intellectual

power in them. How often we act as though we believed more in the efficiency of external restraint than in self-restraint in developing the power of self-restraint. Do not many of us put the little folks in position instead of requiring them to put themselves in position? I have seen a teacher stand by a line of children when filing out of the room, and with her own hand move to right or left, forward or backward, almost every child in a class of fifty. Did not this teacher act as though she thought the exercise of her power of directing the children would ultimately make them capable of directing themselves? Many a teacher relies almost exclusively upon the stimulus of his ever-present look, his inspiring voice, his word of admonition, and his quiet gesture, to hold the attention of his pupils to their work and to keep them from open acts of disorder. Is this the means of developing in the children the power of self-direction and self-restraint? As well may you expect to develop a pupil's muscles by walking for him, as to hope to increase the power of his will over his actions by the exercise of your own will. Teachers should be omniscient, but not omnipresent. Power is developed by the use of power. Additional power of will is gained by using the power of the will already possessed.

2. The second principle that has its special application in school discipline is this: Habits are formed by the repetition of processes. It is not an occasional act of attention, of erect posture in sitting and standing, of distinct articulation, of instantaneous obedience, of self-restraint, of continuous application to study, of deference to the rights and privileges of others, of examination into the effects of conduct, or of conforming ones actions to the dictates of conscience,—it is not one of these acts that forms the habit of so acting; it is the uninterrupted succession of such acts that creates so strong a tendency to act in the same way under the same circumstances that the tendency holds us to further repetitions. And yet how often we lose sight of this truth. We allow, or permit, certain pupils in a class to obey when they choose and not when we command, and then wonder why, in the course of time, they do not become habitually obedient. We seem to forget that acts of disobedience form habits of disobedience. We allow boys to stand and walk awkwardly, and then wonder why they do not learn to act like gentlemen. We have a few words or sentences spoken with all the precision that we can command, but

allow slovenly articulation and pronunciation during the rest of the reading lesson and in all other vocal exercises, and then wonder why the pupils, under our excellent elocutionary drill, do not become elegant readers and speakers. It is not an occasional act of politeness, or kindness, or duty, that fixes the habit. Habits are best formed by an uninterrupted succession of similar acts; and this law applies equally well to body and mind, to intellect and will.

SOME PROS AND CONTRAS ON UNIVERSITY EXTENSION.

PRES. CHAS. W. SUPER, OHIO UNIVERSITY, ATHENS, OHIO.

IT is probable that no educational movement of recent date has awakened so much interest and even enthusiasm among the English-speaking people as that known under the name of University Extension. Though not exactly a new thing under the sun in Great Britain, its importation into the United States has occurred so lately that it may almost be said to have been brought in under the McKinley Bill. In the present state of excitement over the subject, it may be regarded as one of the series of "crazes" that have in turn seized upon the American people with such vigor as for a time to overshadow almost every other educational question. It will not be denied that our people have, to a certain degree, a permanent interest in the higher education. But, unfortunately, the name too often counts for more than the thing. How true this is may be seen in the fact that scattered all over the West are "universities" that graduate students with all manner of degrees, who could not obtain admission to the sophomore class of any reputable college. Because it is so easy to complete a course and get a degree, equivalent, in name at least, to that given any where, these institutions flourish, in the popular sense of the word. It is more than probable that the misnomer employed in the term "University Extension" has not a little to do with the popularity of the movement. In truth, however, to say, as is often done, that the university goes to the people is so ridiculously wide of the mark that no well-informed man can be misled by it for a moment. Peripatetic lecturers with a talent for popularizing certain kinds of knowledge and interesting mixed

audiences are not able, even if so disposed, to give their hearers a measurably adequate conception of university work. The modern university can not be transferred from one place to another at a given signal, as sometimes happened during the Middle Ages upon the breaking out of the plague or of a sectional quarrel. Its permanent appliances are so important a part of its equipment that it can only with difficulty be transplanted. There is little doubt that the greater part of the teaching done under the University Extension system must fall within the range of the preparatory school, and that the best of it will not rank with the higher grade of college work. Many subjects indispensable in a scheme of complete education can not be treated in popular lectures, except under the most favorable circumstances. Moreover, instruction by lectures is only suited to persons who are already fairly familiar with the matter in hand. It is almost universally admitted that the elements of a subject cannot be taught by lectures. Among the branches that cannot be thus treated are all foreign languages, and those that require the use of apparatus, except the most simple, for their elucidation. There remain, however, some branches of mathematics, literature, history, and, what we may broadly term, philosophy. But even here the university standard cannot be attained without the help of a library, and generally of such a library as can be found only in large cities, and then not always.

Educators are not fully agreed on all points as to what shall distinguish the university from the college, but they are a unit in regretting the loose and indifferent way in which the term *university* is used in this country. It will not be disputed, we think, that the university as such should encourage original research. The student who is prepared to do work of the university standard must have reached a point in his intellectual training where he shall no longer find it necessary to spend his time exclusively in learning what others have found out upon a particular subject, and be able to reach and defend independent conclusions. The lawyer or the physician who can do no more than blindly follow the prescriptions and precedents he finds in his books will never amount to much in his profession. He must know how to combine and interpret the facts and symptoms in each particular case, and to draw his own inferences. In a sense, he may be said to be the creator of knowledge. That a majority of professional men

never reach this stage arises in part from an innate lack of capacity and in part from defective education. So the historian differs from the mere compiler of history in the power to interpret the occult meanings in the documents he studies, to divine the minds and motives that underlie the dead symbols.

If an educational institution is to be measured by the quality rather than the quantity of its work, if its standard be one of height rather than breadth it is evident that the character of its faculty rather than its number, or that of its students must determine what constitutes a university. Half a dozen professors with a score or two of students may attain more nearly to the rank of the ideal university, than ten times this number pursuing a different aim. It is a thousand pities that so many people assume whenever a school, having a somewhat more than local patronage and a standard above that of the grammar school, has reached a certain enrollment it therefore, *ipso facto*, becomes a university. The mere census-taker determines its rank as though he were dealing with so many cattle. There is evidently no fairer mode of deciding what shall constitute a university than the extent to which studies may be pursued within its walls. An institution where anybody can learn anything is an impossibility. Plainly then University Extension can in hardly any case approximate even closely to the real university standard of instruction.

But again, the movement must be largely promoted and carried on by the colleges, and even by institutions of still lower nominal rank. How absurd to employ a name that is so manifestly inappropriate. It would be more in accord with the fitness of things, and more in harmony with the real object in view to adopt some designation that should entirely omit the university idea, such as Education Extension, or Society for the Extension of Knowledge. And if it be asked with Shakespeare "What's in a Name?" we reply, often, a great deal. Such a question comes with ill grace from educated men who above all others ought to know and to correctly designate what they are talking about. The public has long since fallen into the habit of using a loose and vicious educational nomenclature, and it ought not to be abetted by those who know the meaning of words.

Though the name is of foreign origin, one is strongly tempted to attribute its sudden popularity in the United States to the popular fondness for the high-sounding title with which it has been

ushered in. Everybody likes to be connected with something that is called a "university." We shall probably continue to extend this term until it is applied to every institution in which knowledge is imparted and acquired, only adding some distinguishing appellation by which the public may know whether any particular "university" is intended for the instruction of deaf-mutes, idiots, or convicts. It would seem that the educational millennium is almost in sight.

The writer of these criticisms does not wish them to be understood as directed against the objects of University Extension. Much may be done in this way toward bringing the higher education prominently and clearly before the people. There are doubtless many neighborhoods and even towns of considerable size in the older states, to say nothing of the newer ones, from which not a single person has ever attended a college. The sole reason is that the matter has never been brought to their attention. On the other hand, the writer has in mind a township in which there is not even a village, and the people of which are all poor, from which for nearly two generations, there has gone forth to some college a constant succession of young men, for no other reason than because this course has become a sort of neighborhood custom inaugurated many years ago. This community will never be reached by any University Extension; and the above fact is only cited to show what an interest in education will do, no matter by what means aroused. In many communities the village or even the country school bounds the educational ambition of the young because they have hardly more than heard of any thing beyond.

But it is probable that the town, using the word in a general sense, is quite as much in need of the gospel of higher education as the country, if not more. Cities and towns have much fewer than their proportion of young people in college, considering the question from the standpoint of mere numbers. If we take into account financial ability, the disproportion is far greater. But here the allurements of business, and the desire to get rich are so strong that comparatively few young people can resist a sufficient number of years to earn a collegiate degree. Among such the University Extension lecturer can make useful propaganda, and it is here that he will probably find his labor prolific of most good.

It is often regarded as undignified for the members of college

faculties to "drum up" recruits for the institutions with which they are connected. No doubt ignoble competition is sometimes engendered in this way. But if the drumming consists of nothing more than a presentation of the value of education to the future citizen of the Republic, no fault can justly be found with it. If the preacher of educational advantages is to gain genuine converts he must be sent; if not by a college or university then by an inward monitor that tells him his misson is a righteous one. If both are united in the same person his pleas will be all the more convincing.

University extension being still in its earliest infancy in this country, it would not be safe to predict what its future will be. But when we take into account the fact that by the admission of its warmest advocates only a small proportion of any body of professors and teachers have the needed qualifications for success in this field, and that for learners it does not mean degrees or other literary honors, but only hard work for knowledge, inspired and sustained by the love of it, one is strongly inclined to think that it is not destined to accomplish what is claimed for it. One thing is certain, those who expect the movement to provide any easy road to culture and knowledge; to plant a branch university in every city and town in the Union, will be doomed to disappointment. That it is destined to be more than one of the several educational agencies now in operation, calculated to turn the attention of our young people toward the universities and other higher educational institutions now existing is hardly to be expected.

It is probable that University Extension lecturers will find their most fertile field in directing persons to where knowledge may be found and interesting them in it, in a general way. It is simply astonishing to see how small a proportion of teachers know even the titles of the best books bearing upon their work. In the minds of many persons, first, second and third rate writers are jumbled together indiscriminately. Any book that is entitled a History is as good as any other. Comparatively few people think it worth while to read more than one historical book bearing upon a particular period, because it is supposed to contain all that is to be known. They have no conception of the importance of the personal equation in the composition of history. Of persons who are willing to purchase books few know how to do so with judgment. Anyone who will direct interested parties wisely and

with the discrimination born of a thorough familiarity with the different subjects, will render an important public service. This is nevertheless but a small part of the functions of a university. It only requires passing mention that one needs to read but a small number of books to become well-informed, if they are judiciously selected. To contract a "reading habit" that is satisfied with almost anything that appears in print is hardly less injurious than not to read at all. In our day books are the most far-reaching and potent teaching force; and after them the higher order of periodicals. But the latter, unless wisely used, are only to be commended with caution, because the wide range of their topics is likely to produce mental dissipation. If, then, University Extension does nothing more than to direct honest inquirers how to read wisely its existence will be amply justified.

THE SUPPORT OF THE SECONDARY AND HIGHER EDUCATION BY THE STATE.

REV. A. D. MAYO.

(*Concluded.*)

THE justification of any public institution is its bearing upon the welfare of the people. All good citizens pay taxes for a hundred things which never bring direct profit to themselves, but do promote the public safety, prosperity or morality. This public support of the secondary and higher education, which has always been the policy of the American people, cannot be tested by the question whether Mr. A. or Mr. B. who are large tax-payers, educate their children in the free schools. If these schools are bound up with the highest interests of American society and qualify numbers of people for the most important duties, the most generous expenditure upon them is justified.

Nobody denies that the old-time American college and academy has been an inestimable blessing to the country. It is not too much to say that without the class of men produced by it, our colonies never would have been separated from Great Britain. New England, the home of the common school, furnished the majority of soldiers that fought the War of the Revolution. A majority of the committee of twelve who drafted the great ordinance of education in the Congress of the Confederation were

graduates of the highest schools existing in the colonies. The early settlers of Ohio, first of the new states, from all the colonies, were largely men of liberal education. It will be found that spite of the boasts of a class of able, "self-made men," the higher life of every western state has largely depended, from the first, on men educated in the best seminaries open to the youth of their day. But nobody will question the importance of a body of educated men in national affairs. We heard a good deal about extempore military genius at the opening of the late war; but every military reputation of the first-class, in either army, at the close, dated back to West Point. So has it always been; so will it be to the end of time; the educated, trained class in society will, in some way, lead the uneducated, untrained mass.

Now, the point on which I insist is this: that, up to the year 1830, sixty years ago, when the free high, university and normal school were evolved from the subsidized college and academy of the old states, a large portion of the foremost colleges and academies in that region owed their early existence and much of their efficiency to the aid of the state. With no desire to do injustice to the denominational and private schools of that period, we are confident that without the early and persistent assistance of the public purse, few of these institutions would have been able to do the work so honorable to them and so useful to the country; and, certainly, without the encouragement of the great donation of public lands, the new western states would, to-day, be half a century behind their present status in all grades of schooling.

The present system of public high, normal and university schools, — free to the youth of the locality or the state that supports them, while they largely take the place of the old academies and colleges to outsiders, at a cheaper rate, — has not been long enough in operation to furnish the same amount of demonstration of public utility as the system out of which it grew. Even in New England but one generation has gone out from the high and normal schools, while, at the West, their graduates are chiefly found among the young women and men. But we are abundantly willing to take even this result as a perfect demonstration of the wisdom of the American people in carrying forward the original system of subsidies to the complete support of superior education. If we were to believe some of the opponents of the free higher education, these schools demoralize the youth of the coun-

try; are filled with lazy, frivolous young people who fly to them as a relief from manual and mental labor, and graduate a crowd of students who drift about the land in helpless incompetency to get a living. Let us then see what these schools have actually done for the country.

1st. They have all the time, for the past thirty years, been lifting up a numerous class of youth of both sexes, from families who never could have given their children superior advantages of education; and these youth have been and are becoming, in numberless instances, the most worthy and hopeful men and women of the land. Beside going forth to fill an honorable place in society, each of these youth, if his life and health are spared, becomes an elevator of his own family, raising it to a position of competence, comfort and respectability, and relieving society of the burden of its support.

I have in my mind at this moment, two young women, now teachers in high schools in Massachusetts, each of whom has within the last dozen years, not only brought herself up to an honorable position, with a salary of $1,000 a year, but, while doing that, has helped to support a large family of brothers and sisters, educating them in the public schools, till now every one of them of suitable age, is self-supporting, and the families are living in comfort and independence. These are not isolated cases. The country is full of young men and women who, but for these free high and normal schools, never would have come in sight of positions they now fill to the great advantage of the people; and their families would have remained a burden to friends and a peril to the community. Every family of children living in desperate poverty or held down by lack of opportunity, is a deadly peril to the state. Such children ripen into the criminals, the communists, the mischievous class of every city and commonwealth. The young woman or man, who pulls up one such family to honorable independence and launches a group of younger brothers and sisters on an honorable career, deserves a laurel crown with the thanks of the commonwealth.

A majority of the members of the Legislature of Massachusetts to-day, are graduates of the higher grades of our Massachusetts common schools. An actual inspection of society through the whole country where these schools have existed twenty years, will show us that a most influential class of men and women are their

graduates. When the question of interfering with these schools comes before the legislature of any state, as in New York a few years since, a host of defenders springs to the front among the leading people of all communities, and the bill goes suddenly to the waste basket in the committee-room.

The charge that these schools contain a crowd of ignorant, lazy children who obtain only a smattering of knowledge, is a charge against the method of teaching and conduct, not against the system. The people can see to it that the doors to all these free schools of higher grade are guarded by a rigid examination; that the elementary grades send up good material; that the instruction is good and the tests justly applied. Any young person who is willing to go through the toil and self-sacrifice of a thorough course in a free, high, normal or university school, thereby shows a fitness for a position higher than an uneducated and untrained workman. The true sphere of any American child is the best place he can reach and honorably hold by the free encouragement of the state. We are largely governed, and well governed too, by men and women who, but for this aid of the public higher education, could never have risen above mediocrity, or, in rising above, would have been so crippled in body and soul that the state would have been deprived of half their service.

2d. These schools are now, to a great extent, producing the superior teachers of common schools in all the states of the Union. The best teachers of the country, previous to the establishment of free high and normal schools, were the graduates of the academies of New England and New York which were subsidized by the state. Mt. Holyoke Seminary was aided, at a critical period of debt, by a grant of $40,000, of public funds; and we all know what a force that seminary has been in the school-rooms of the land. But now the vast majority of the superior common school teachers of New England and the Middle and Western States are the products of these free institutions. Ninety-one per cent of the people of Massachusetts live in communities which support a free high school, and a majority of the superior teachers of these schools are, probably, graduates of them. Thirty-seven per cent of the common school teachers of Massachusetts are graduates of her free normal schools, and ninety per cent of the graduates teach. These graduates not only teach at home, but go to all the states of the Union. A large proportion of the leading superin-

tendents of education, state and local, in the Union have been trained in superior schools, wholly or partially free. The normal school at Oswego, N. Y., one year sent graduates to eighteen states, to take superior positions in superior schools. New England, to-day, owes a great part of her fame beyond the Hudson to the young men and women graduates of her free superior schools who go West, marry, become leading women in all communities, or rise to honorable positions in the state. If the general government can justly support the military and naval academies and the great armories to instruct a superior military class, and can train and arm the common soldier at a large cost to the state, shall we not be justified in drilling and arming this mighty host of 500,000 American teachers, who alone can save the people from chronic revolution and, at last, will lift the country above the dread of another civil war?

Beside our new methods of instruction in common schools, which have increased their efficiency ten-fold, could never be handled by the "go-as-you-please" style of school master and school ma'am turned out by the old-fashioned academy, or developed by the Gail Hamilton recipe of mother-wit and experience in a country district. Only the state has the ability or the power to insist on a style of training for teachers which will hold the common school to even its present state of efficiency, to say nothing of the great advance that we all pray for in its methods and economics. In ten years the United States will save more money by skilled labor in the school-room than all the expenditure for high and normal schools, from sea to sea. The free universities are now establishing departments of pedagogics to extend this training in the profession of instruction to university students. The free superior education has been fully justified by this one result; in furnishing a class of superior teachers for the common schools.

3d. Not the least important of the results from this foundation of the higher education, is a growing class of well-educated and trained young men and women who are reënforcing the upper realm of business life. The great majority of the young men who graduate from our high schools do not seek the professions but finally obtain positions in the ordinary mercantile and mechanical occupations. A considerable per cent of the girls in cities find quick employment as superior assistants in manufactories and

stores. The graduates of Cornell and the free mechanical schools of the country are taking the highest rank as engineers and skilled workmen. The free drawing schools of the East and the West are telling already on the upper ranks of skilled mechanical labor. Great numbers of young men now obtain a better practical general outfit for professional life in the superior high schools than anybody could obtain, in my youth, from any American college, save Harvard and Yale. But, more important than this, is the crowd of well-educated young men, trained to use their brains in general investigation, who enter business. The charge occasionally made by wealthy, "self-made men," that the high schools are an industrial failure, comes with an ill grace from the members of the mercantile and manufacturing classes, in which ninety per cent fail in business, and the remaining ten per cent succeed, often, by financial "ways that are dark and tricks that are vain." The smutch of unskilled labor is all over the ordinary business of America, from the worn-out farms of New England and Virginia to the shiftless and wicked business methods that have already turned the laboring class against the capitalist in every state, and to-day hold great classes almost on the edge of civil war. Any agency that proposes to reënforce the commercial, agricultural and manufacturing classes in America with brains, trained ability and superior information, is entitled to a respectful hearing. Already the free education has brought a mighty help to each of these long suffering departments of American life, and the good work will go on. Each of the industrial professions in America could afford to pay all the expense of the free higher education in consideration of the superior intelligence and trained power rendered back to itself.

4th. Equally true is this statement in relation to public affairs. It is the fashion to say that the only hope for American politics is the coming to the front of a class of experts who shall lead the people. We sadly need the experts; but the American way to grow them is to fling open all doors of preparation and let the best come to the front. The late President Hill told the gentlemen, at the Harvard College dinner, two dozen years ago, that every honor that year had been taken by a poor boy, generally from the country. But we need something even more than a class of political experts; — a great body of voters who do not expect to hold office, but who are competent to make a fair esti-

mate of measures and men, and who, with one hand, can keep down the dangerous agitation from the lower region of superstition and ignorance, and, with the other, curb the wild ambition that seems to change so many great American statesmen to fools and madmen. It is here that our free higher education is to gain its great political triumph. The State of Massachusetts may be won and ruled by a party that seldom, in my recollection, has placed its candidate in the governor's chair. But any party in the ascendant in the Bay State must conform to a public opinion made and controlled by a powerful body of thoughtful, well-informed, resolute people trained in a common school. It was that class which saved the Union in every northern state. The free higher education is all the time reënforcing the centre of the American army of Liberty and Union that will stand unbroken against all assaults, and finally rout and exterminate every enemy in church or politics, native or foreign, that attempts to make us anything but the progressive Republic we are to-day.

5th. But nowhere is the free higher education telling with such power as in the superior opportunities it offers to women. I can remember the day, half a century ago, when, outside a few respectable girls' seminaries and country academies, there was absolutely no opportunity for the advanced schooling of our New England girls, and these opportunities could only be enjoyed by a prolonged and expensive absence from home, quite beyond the reach of the mass of good families. One of the first movements to bring cheap and good schooling to Massachusetts girls was aided by the state, at Mt. Holyoke Seminary. This state of things continued till the advent of Horace Mann.

The women of Massachusetts ought to celebrate the 19th of April and the 4th of July with a double enthusiasm; for on the anniversary of the battle of Lexington, the Legislature of Massachusetts passed the act establishing the first American normal school which held its first session on July 4th, in the old town of Lexington. That normal school, afterward removed to West Newton, and now at Framingham, through its advanced course, was practically the first free school in Massachusetts where her superior young women were able to aspire to an education resembling the collegiate course of their brothers; and the roll of its graduates is crowded with names that are honored and loved to-day in every American state. To-day, in all northern states of

this Union, the superior girls are able to obtain a good education in these free high, normal and collegiate schools. Or, if not living in the localities where they exist, they all receive students at prices far below the similar grade of private schools. The high school of Hartford, Conn., is crowded with the best young women of that city and the superior youth of a circuit of two hundred and fifty miles, and the same is true of all our best city high schools.

This great foundation of the free high schools has also raised the standard of private, academical and church institutions, all of which are compelled, in self-defence, to conform their curriculum and methods of instruction to the public schools; many of which are taught by graduates of the state and city normal schools. The free universities, with one or two exceptions, first opened their doors to women. While the old, wealthy, corporate universities of New England proudly held themselves aloof from contact with the daughters of the East, or extended backward a tip of a jeweled finger sparkling with the gifts of women, in the form of a Harvard examination or a Cambridge "Annex," the great new colleges beyond the Hudson, often munificently endowed, officered, and taught by some of the ablest men in America,—men like Angel, Tyler, Bascom, Gregory, the two Whites, Jesse Orton, Northrup;—cheerfully welcomed the young women of the West to their full opportunities and smiled at the timid apprehensions of their sister colleges down East. I cannot understand how any woman who reflects on what the American people have done for the education of her sex, in the free superior school, can find it in her heart to speak disparagingly of the public support of secondary and higher education by the state. It has made it possible for hundreds of thousands of promising girls to obtain a good culture in letters, while living at home in the most sensitive years of girlhood, and with the help of a free library, to become a different kind of woman from what they would otherwise have been. Whether the women of America are to demand the ballot or not, the gain to the country by this prodigious amount of good schooling of the girls, in the critical era of public affairs upon which we are entering, is not to be measured by any table of statistics or estimated anywhere save in the growing ability of a great people to govern itself.

6th. But the crowning advantage of this system of free secondary and higher instruction is the type of character-training

first introduced by it into American school life. All American colleges and academies, previous to the establishment of the free superior schools were professedly religious; generally under the control of some Christian sect and officered largely by the Protestant clergy. And far be it from me to undervalue the mighty Christian influence of these old-time schools or of their commendable success in the discipline of character. But, since it has become a sort of fashion, now-a-days, for the friends of this class of schools, including the Bishops of the Roman Catholic church, to cast indignity on the free superior school system as "godless and unchristian", I feel impelled to say somewhat on this point. I am content to leave the awful question of the final destiny of every soul in the hands of God, from which only human presumption would remove it. But all good people are competent to judge of the effects of educational training upon the character and conduct of men and women in this life, and here the friends of the free high, normal and university schools may take their stand and defy comparison, school by school, scholar by scholar, town by town, from Maine to Texas.

The establishment of this new class of superior schools for boys and girls, governed by laws enacted by school committees elected by the people, always open to public inspection, sensitive to public opinion; has brought in a new era in the school discipline and training of young people. The private school and academy, in character-training, are only an extension of parental and pastoral authority; an authority which the majority of youth, at fifteen begin to question, and which is more and more put to the strain as the youth approaches manhood and womanhood. Everybody knows of the constant trouble of discipline in these schools; not due to the negligence of the teachers and managers so much as to the difficulty of governing at such ages by merely parental, pastoral or pedagogic authority. The American college has sometimes attempted to imitate the European universities and make itself a little world within the state, where young men should be tolerated in barbarous and unmanly practices which would never be endured in a Christian home or in polite society. The children who would haze the new baby in the family would be whipped and put to bed. But the "young gentlemen" who insult, abuse and often seriously injure the college infant, the new freshman, become the idols of young ladyhood

which trolls out drunken college songs and exults over vulgar college exploits in a way that opens the eyes of a Christian mother. But no entering class was ever hazed by an American free school; no boy or girl, however poor, or stupid, or ungainly can be insulted or hindered in any way there without swift and sure retribution. The very fact that these young people in the free high and normal schools are living under a real government, —a system of school legislation, enacted and executed by paid officials of the state, that every offence against law is in the face of the whole people, that every disgrace is a public disgrace and every triumph brings public applause,—polarizes them, puts them on their honor, gives them the feeling of manhood and womanhood, and brushes away, at the sweep of the pen, a whole class of perils that vex the academical and corporative schools. No student in a free school can drink liquor, smoke or use a profane or obscene word without a disgrace that is blazoned in the morning journal. It hardly becomes institutions whose students are violating half the Commandments, whose theologues and secularists break noses in drunken street fights, whose disciples are expelled by the dozen for walking in masked procession insulting to the faculty on Washington's birthday, to parade their "Christian" influence above a class of institutions which, in all essential respects, can show the cleanest character record of any class of schools in the world, and that among children at the most perilous age, from fifteen to twenty, in schools generally attended by boys and girls.

It is easy to understand the cause of this. No one but an utterly abandoned youth flies in the face of school authority when his offence will expose him to public disgrace in a school where as strict justice is administered to all as in the courts of law, where every pupil is a natural police on his companions and every family on the watch for the least swerving from morality. These schools have also the immense advantage of a mingling of experienced men and women in the board of instruction. The "first lady assistant" in the American high school has such a power to form the character, manners and womanhood of the girls as few other women have, and there is not a nobler body of young women on this continent than are employed to-day as teachers in the free high and normal schools. No school save one entirely governed by the whole people can do this thing. There is no bet-

ter way of training a child than blending with the family and church, after fifteen, this rehearsal of social and public life in an institution created, officered, and administered according to the highest ideals of justice and morality in a republican state.

The most forcible points made against the system of free superior education are only criticisms of the present methods of organization and instruction in some of these schools. Here there has been a need of reformation. It would seem absurd to compel every pupil in a high school to shoulder a miniature college course of study; or, as I found the case in a village of three thousand people in Massachusetts, to plod through four years of the Latin language. It is doubtless necessary that a majority of our normal schools should give academical instruction, and that some of our new free universities should support a preparatory course; yet both these are a necessary evil. Still, there is no class of schools in America so sensitive to valuable criticism, so open to reformation, so rapidly improving in all the essentials of a good outfit for the average American citizen, as these. The best of these schools are in the most cultivated communities. In Washington, once, I found a colored high school where every child was staggering under the load of seven studies. Our Boston superintendent, Dr. Seaver, probably would limit the superior children of that city to three studies; and all our best high schools are working in the direction of concentration, simplicity, and thoroughness. The people can make these schools what they will. And, since the sovereign people are determined not to let them go, may it not be well for us to turn in, all together, and try to make them the best they can become?

NATURE STUDY IN OUR SCHOOLS.

SUPT. B. B. RUSSELL, BROCKTON, MASS.

ALTHOUGH much had been done by the teachers, with varying degrees of success and with differing shades of value, in the matter of teaching elementary science, no united effort had been made in Plymouth County up to the fall of 1888; and, so far as I know, no such effort had been made by any other county of Massachusetts. But at the annual meeting of the Plymouth County Teachers' Association of that year, after the delivery of a very able paper on "School Work in Natural Sciences," by Mr.

G. H. Martin, agent of the State Board of Education, a vote was passed and a committee of five appointed to consider the advisability of introducing a course of natural sciences into the public schools of the county. This committee was to report at the next meeting.

At the meeting in October, 1889, the committee reported, and the association voted to print the suggestions contained in the report and to send a copy to each teacher in the county, also to send to each teacher in June, 1890, a list of questions concerning the work done.

Plan of study proposed by the committee:—

WINTER TERM.

Study of trees, native and cultivated, in the following order:

(*a*) General appearance: — size; form; branching. Sketch.

(*b*) Distinctive marks: — bark; buds; favoring locality and soil: leaf-habits, (time of shedding, etc.); wood, appearance, qualities, and uses.

In spring add study of tree-leaves. Sketch and press.

SPRING TERM.

Study of native plants in order of appearance in flower:

(*a*) Common name. Make list on board.

(*b*) Favoring locality and soil.

(*c*) Distinguish as herb, shrub, or tree; as annual or perennial.

(*d*) Time of flowering.

(*e*) Parts of flower, distinguish and name. Sketch.

The following suggestions were made to teachers:

(1.) Study trees *with pupils* in out-of-school walks. (2.) Use facts gained by observation for oral and written language training. A permanent record book for each pupil may be useful. (3.) Accompany work as far as possible with free-hand sketching. (4.) Do all the work suggested, if possible. In any case *do something*, and note carefully the result.

In the summer of 1890, the following questions were sent to every teacher: —

1. Number of trees studied.
2. Number of specimens collected: woods, other parts.
3. Do the collections belong to school, or to individuals?
4. Number of trees *found* and *named*.
5. Number of specimens preserved.

6. Have you studied animals or minerals at all?

7. Please state, in general: Plan of work. Time given to it. Have you used the work in language, drawing, geography? Do the children like it? Does it stimulate interest in other school work? What feeling is shown toward the work by people outside the school?

Of the twenty-seven towns in the county reports were received from nineteen, and from forty per cent of the teachers. The changes among teachers during the summer probably reduced the number of reports.

The Report of the Board of Education for 1889–90 speaking of this work says: "Fifty-four reported from 1–10 trees studied; eighteen from 10–20: eight from 20–30; five, from 31–40; one from 40–60; one reports 70." "In plant study twenty-seven reported 1–20; twenty-two from 20–50; sixteen from 50–100, seven more than 100; one reports 175." "Forty schools reported some study of animals, and twenty-five some study of minerals."

This was the result of the first year's work. The same committee has been continued in office this year, and the plan for the work has been the same, the outline in some particulars being a little more definite. Of the reports this year 114 have fallen under my notice, coming from fifteen towns and one city out of the twenty-seven. Sixty-four reported that they studied from 1–10 trees; eleven from 10–20; four from 20–30; three from 30–40; one over 40. Several say they have studied all the kinds of trees in their locality. In the study of plants thirteen report having studied from 1–10; ten from 10–20; fourteen from 20–30; eleven from 30–40; fifteen from 40–50; eleven from 50–60; six from 60–70; nine have studied 100 or more and two 144. While twenty-eight have studied minerals and fifty-four (nearly half) have studied animals.

It was suggested at the outset that the study of plants and trees offered the greatest hope for success as the teachers were best prepared, or rather least unprepared to teach them, but the field is broadening. In this work the teachers have taken the children by the hand, to speak literally as well as figuratively, and gone into the woods and also, so to speak, brought the woods and the flowers into the school-room where they could be seen and talked about.

In Hingham, in addition to work in botany and zoölogy, much has been done in the study of minerals. In reply to questions

about this subject, Superintendent Nash says, "Our best work is in botany and zoölogy. We study minerals and rocks during the winter-time, when plants and animals are less accessible. We begin in the fourth grade, and take up soil, clay, sand, gravel, etc., for examination and for language exercises. Then we follow that up in the fifth and sixth grades by learning to recognize the minerals and some of the rocks that are found in this neighborhood. We do not use any tests, but simply learn to know them by sight and use them as subjects for language-work, paying particular attention to the *uses*. In the eighth grade we take up mineralogy during the winter, and study as a science, learning to know common minerals by their distinguishing marks, and to know rocks by the minerals which compose them. Our children in the eighth grade are expected to make a complete collection of the rocks of Hingham, and to label the specimens for themselves by their own knowledge."

In the city of Brockton, the study of trees has been carried on as set forth in the circular. In some of the schools nearly if not quite all the kinds of trees of the locality have been studied. A less number, of course, in the lower grades. Collections have been made in some cases for the schools, but more frequently by the pupils for themselves. These collections consist of cross-sections to show the end, and divisions to show the bark and heart. Some of the schools have made collections showing the various kinds of wood as used by builders. They have noted the differences of branching, as between the elm and oak. They have noted the difference in the height of trees, and other characteristics.

In the study of plants they have also followed the circular. Leaves have been collected, pressed, and saved for the drawing lessons. I have been surprised at the readiness with which even the younger children have taken hold of this study and conversed about the parts of the flower. In addition to the study of plants and trees, there has been some, though not as thorough, study of minerals.

More time has been given to insects than to minerals. The plan has been to begin with the general subject, — animal — and separate into the branches, vertebrates, articulates, etc. In the lower grades these terms were not given, but from specimens the classification was shown, while in the grammar grades the names of the branches were used. Then the branch, — articulate — was taken

up and insects studied. In this the plan has been to collect and bring to school alive all the insects that could be readily collected, especially the larvae. These have been fed by the children; volunteers taking them home Friday nights to keep and care for over Sunday. They have watched them while eating, seen them spin cocoons and observed the transformation. They have written on the boxes containing the larvae the date of collection, name of plant, or tree, on which they were feeding, characteristics of same, date of cessation of eating, time of spinning cocoon, or of entering the earth, time of transformation, characteristics of the perfect insect, etc., so that each box gives, on the outside, the biography of its inhabitant. In the upper grades the names of the orders have been given; Hyménoptera, Lepidoptera, etc., but in the lower grades the common names, butterflies and bees, have been used.

The insects are used in the language study and drawing in the same way that trees and plants are. In one school the pupils asked the committee to furnish colors so that they could paint the butterflies. Their request was granted, and in their home study some very creditable work was done. The parents are much interested in the study of nature, and in some cases are evidently learning something. After one of the teachers had given a lesson on the germination of seeds and the plantlet, she received a note from the father of one of the children requesting her not to teach anything that was n't true, "for," said he, "there is enough that is true." She wrote him a polite reply and asked him to soak a bean three days and break it open and write her what he found. He did so and wrote her that it was something he did n't know before, and that he was surprised to find it was true. One gentleman, and he not having children in the schools, gave each one in a school of five hundred a gladiolus-bulb to plant for himself. The parents have coöperated in sending plants and insects in such a manner as to show that they were interested in their own behalf.

I have asked this question of some of the teachers: — "Does n't it hinder you in your other work?" The usual reply is, "No, it is a help. The children seem so much more intelligent that we can really do more work." Those teachers who do not wish to take up any new studies, even for their own improvement, and would be glad to drop some which they now have and more glad

to drop all of them, consider it a burden. The time given to this work varies from five minutes a day to an hour a week. One teacher says she gives very little time *in* school, but the children come five minutes before school-time, gladly, to bring their collections and to talk about them.

If we may draw a safe conclusion from the reports (and they are the most reliable source at command) we must conclude that a large amount of systematic work in elementary science is being done in Plymouth County. I may add that I have visited several towns and observed the work and find the same methods are pursued in the different parts of the county, and I have not found a school that was not doing something.

In conclusion I wish to say that I entered upon this work with some hesitancy. Not because I had any doubts of its value, but because of the effects on the other studies. I had two fears: First, that the over zealous teachers would neglect the regular work, and so I charged all of them to first be sure the other studies did not suffer by the introduction of this. This, of course, did not stimulate them in the work. I have watched carefully but have failed to find that any teacher has, in the slightest degree, neglected the regular work. My second fear was that some teachers would say that they could not do the regular work and this also. My mind was made up to say to such, "then drop the nature study." But, I have n't had a chance to say it. My fears of its practicability having thus been dispelled, I am heartily in support of the work. I believe this study opens new avenues to knowledge and happiness, and will enable the rising generation to read the pages of nature which to too many of our day are a sealed book.

DUTY OF PARENTS TO TEACHERS.

ALICE HAMILTON RICH.

MANY articles are written, many speeches made on the duty of teachers. Almost superhuman efforts and results are expected of them. The world itself, as in the days of St. Paul at Ephesus, — on the subject of religions, — seems to have run mad on the subject of education. Institutes, training-schools, and the weekly or monthly teachers' meeting, are made use of to train

teachers in both practice and methods of teaching. The educational journal writes wisely and well upon all subjects that will instruct the teacher how to teach the pupil, and rule in the schoolroom; but how seldom we hear or read of the parents' duty to the teacher.

A teacher may have the wisdom of Solomon, the patience of Job and the loving spirit of the Master himself, and yet fail in accomplishing the best results because hindered, nay, often wholly blocked in his or her efforts by the unwise parent. By one careless speech or worse, by an unkind criticism given by a parent before the child, the patient work of months for the child's good may not only be made ineffective, but future good to that child be also impossible.

This is a case where there is less danger to be feared from an ignorant, uncultured and uneducated parent than from one who has had superior advantages. In proportion as the child respects the parent, in that proportion are his words of praise or censure productive of results for good or ill to him. The child of an ignorant parent in time learns that the teacher, in some things, at least, is his parent's superior, and will respect the teacher's words and acts, even when they are found fault with by the parent; while the child of parents who are either the peers, or superiors of the teachers, in culture, intelligence or education, will undoubtedly judge the teacher largely by the estimate made by father and mother. For the child's sake, I plead with fathers and mothers to uphold the teacher, I had almost said, — right or wrong; I will modify that statement by saying, unless it be a matter of gravest importance, do not side *against* the teacher. If there be a matter of principle involved, and after remembering that "Mercy seasons justice," and hearing both sides of the question, an impartial judgment finds a verdict against the teacher, and it seems best that the child should know your decision, take care that it is given in such a way that he will see not only that you regret the matter but believe that the like will not again occur; and show both by words and manner that the teacher still has your confidence. Even a child may be taught not to condemn wholly for one offense. So grave a matter will not often occur. Our teachers in the main rule wisely and well. If they, being human, err, it is much better that the child should not be encouraged either in the knowledge or condemnation of the error. It is

possible, nay, highly probable, that the fault is largely the child's. What parent can say that his or her child is faultless in conduct at home?

I have known parents who complained of their children as being exceedingly difficult to manage at home, yet very indignant with teachers because they had trouble with the same children at school. Indeed, these are the ones most likely to complain.

Others, whose children are comparatively good at home, or even very good under the eye of their parents, are not always models of propriety at school, and this the parents are unwilling to believe.

Others, — and would they were legion — having human children, with the usual characteristics of natural children, are ready to think that a child at school is very likely to occasionally *do* wrong, and *be in* the wrong, and that the teacher is not a natural enemy to the child, or desirous to be in open conflict with the wishes of the parent.

There are two views of this subject; duty to the child, which can only be done by supporting the measures of the teacher, as far as possible; and duty to the teacher, because he or she is the teacher of your child, and thus entitled to your respect, consideration, and often, your warmest regard and appreciation. Let me give an illustration of the effect of unwise influence by a mother upon her child.

A bright but pert little girl, with whom the teacher had been long and patiently laboring, hoping to obtain an influence over her which would result in good, finding all devices fail, said, "I will have to write a note, or see your mother, in regard to your conduct." The child replied, "I don't care; she will believe what I say and take my part!" And the child told the truth, as the result proved, and afterward was even more intractable than before, because she had her mother's sympathy and support in the supposed grievances of the child. The teacher was told "that she ought to be careful not to have favorites in school, but treat all the children alike," inferring that injustice had been done her child by favoritism to others, when the fact was that more time, thought, anxiety and care had been given to this child than to any other in school.

Another illustration in the same school, is as follows:

A boy, from being an obedient, respectful boy, became saucy,

inattentive and exceedingly trying to the teacher. She bore with him for a time, hoping it was but restiveness under authority, not open rebellion, and would soon be over, but finding all measures fail with him as with the girl, said, "I will see your mother." Not quite believing she would do so, he continued his troublesome ways, and his teacher called upon his mother, and kindly but frankly told her of her son's conduct. Grieved to hear the report, she yet thanked the teacher for her interest in her boy, and promised to do all in her power to help the teacher, both at home and in school. There was no suggestion that the fault was with the teacher. The boy was dealt with lovingly but strongly at home. Note the difference in results in the conduct of the two children. This one became thereafter respectful and obedient in school. I do not say he became a model of propriety at all times, — few children are, — except in books; but a crisis in the boy's life was safely passed. He had learned to respect rightful authority at school, and thus through the wisdom of his parents was being fitted to be a good citizen when he became a man.

What of the future of these two children? Teachers, how many like instances could you give? Parents, to which class do you belong?

Thus far, I have had mainly in mind the child's good. What shall we say of our duty as parents, to the teachers of our children? I believe we owe them the most careful consideration, respect, and unlimited gratitude. They do for our children what we cannot do for them. The father, carrying a load of business cares, Atlas-like, upon his shoulders; the mother, busy care-taker for her household, cannot do for her children, in addition to what she is doing, — had she the ability, — what is usually well done for them by the teacher. Having neither ability nor strength to do this, how can she be other than grateful to the one who is carrying her burdens for her and thus "fulfilling the law of Christ"?

Fathers and mothers, take time and thought for, interest in and speak helpful words to, and for the teacher of your children! If you will not do this, in the name of justice to them, and for the sake of the irreparable injury you may do your children, refrain from thoughtless or unkind criticisms of life, methods or manners of those teachers in the presence of your children!

Teachers, take courage, your faithful work is appreciated by many, if not all, of the parents of *your* and *their* children.

THE UNIVERSITY SPIRIT.

JOHN PIERCE, A. M., HARVARD UNIVERSITY.

WHEN men unite in any association or corporation, there arises in each a new spirit, produced by the mutual stimulation and inhibition; they are no longer what they were in isolation; they have lost some narrow interests and gained some broader ones. The spirit of a university is the ideal of a community of scholars, the unity in thought of many diverse elements, the harmony in aim of widely differing opinions. This spirit is realized in different ways and to different degrees in the members of the university, but certain common features, by their intensity and combination, characterize this community of intellect and give it an individuality which distinguishes it from all other institutions of society. Harvard University is taken to illustrate what is true, in spirit, of any school that educates citizens of the world, — the world of nature and of men.

In viewing the different aspects of the university spirit, let us begin with the most mechanical, where the spirit is least free from the machinery through which it expresses itself.

The Spirit of Business. The beggar student found a congenial environment in an age when learning accepted as a gift what it despised as a base utility, and when the giver expected his reward in another world. In all its dealings with its students, Harvard teaches that fundamental distinction of economics, — business *versus* charity. A gift is made to the University, through which it reaches a student, not because he happens to ask one who happens to be liberal, but because he promises to pay it back in future usefulness, and as security can point to good work already done. The corporation seeks good investments in stocks only that it may be able to make good investments in men.

The profession which is most protected from ordinary competition is the ministry. It is generally believed necessary to offer more inducements of a pecuniary sort to young men to enter this profession than any other. What follows in regard to the Divinity school would hold true much more of other departments of the

University. In his report for 1888–89, President Eliot says: — "The Divinity school is conducted, like the other departments of the University, on business, not eleemosynary principles. Every student pays for his tuition, board, and lodging; but the tuition fee of the school is only $50 a year, instead of $150. In the opinion of the President, it is time that even this distinction should be abolished. The Protestant ministry will never be put, in his opinion, on a thoroughly respectable footing in modern society until the friar or mendicant element is completely eliminated from it. * * * To enable young men of narrow means to enter the learned professions — the ministry among others — at a reasonable age, scholarships and like aids are necessary; but these aids should be awarded competitively for merit and promise, as they now are in all departments of the University. Free tuition is not a legitimate aid for selected persons, but an indiscriminate charity."

The aid funds of one and a third million dollars, yielding an annual income of $80,000, are a powerful leverage in the hands of the authorities, not only to incite effort but also to guide it. Where there are not daily recitations to keep students up to a prescribed programme, there is much tendency not to do the right thing at the right time. Harvard leaves its students wide latitude of choice as to the nature of their work and the means of doing it, but heaps up all honorable inducements to secure an elaborate, finished production at a definite, distant time. The weight of the production and the length of the time are increased from the Freshman year on. Many students on the road to the highest degrees go to pieces on that strictest of intellectual tests, — a combination of the fruits of a sharp analysis of particulars and a broad synthesis of principles. It is easy, on the one hand, to plod along, taking lectures, filling note-books, copying extracts, indexing references, — bibliographical hod-carrying for a later self to build something on; or, on the other hand, to turn away from experience and experiment, that hard world where things are not everything at once, to take refuge in flattering abstractions, where the most contradictory thoughts lie cosily side by side, — planning metaphysical air castles, which like other dreams, cannot be shared with any one else, which architecturally lack nothing but the foundation. In all its work, Harvard aims to unite the empirical and the rational, to begin a study historically and experimentally, and to carry it on to its philosophic generalization. In so far as

this is a matter of method and time, it depends on the same habits that make success in business.

The Spirit of Science and Philosophy. The ideals of business and those of theology harmonize, where theology is studied as science and philosophy. What commerce has done to unify men in practical life, that is being effected by science and philosophy in the theoretical. Trade brings men together in many capacities, but leaves them still isolated in much of their feeling and thought. As they turn from their business, men tend to unite in small circles on subjective and narrow interests; but science and philosophy enter each of these spheres and universalize them. In a university, all interests are tested by the principles of the whole; here we feel at its height the intellectual spirit of loyalty to objective truth, of freedom in studying and teaching, of impartiality in criticizing individuals, of respect for the authority of knowledge, of indifference to mere persons. To the scientist, persons are of importance as they are subjects, embodying knowledge, or as they are objects for observation and experiment. So it comes about that the university spirit, which appears cold and even cruel towards humanitarian interests, is indifferent to nothing that is human; and just as the principle of business *versus* charity results in the most true charity, so the principle of science *versus* sympathy brings the most real sympathy. The man who, in the business world is a mere pauper, becomes for the social scientist an interesting species of the *genus homo.* Physiology and psychology, the most human of sciences, owe their latest progress to the tender study of the broken machines which society relegates to the hospital and the prison and the asylum. When for the teacher his pupils have become only mischievous children, only silly girls and blundering boys, let him set it down in his tables that such things are human, and proceed to note the causes and consequences. Then he may begin to take interest in them as they are, and may discover that he is taking the surest and easiest road to make them what they should be: he would not wish them perfect, if to be perfect meant to be unnatural.

A universal interest depends on a far-reaching specialism, which thrives best in a university; in proportion as a science admits of narrowing its path and quickening its progress does it offer early opportunity for skill and fame: there are few who can add to metaphysics and mathematics, but any one can go where no one else has gone in psychology or geology.

The university impartiality and criticism go with the freedom of the place. Live and let live is the motto in science and philosophy. The critic is only doing in his sphere what the farmer does in his when he separates the cheat from the wheat. Where men have great commercial and political freedom, their conservative instincts tend to be massed on the spiritual plane, giving themselves a body of scientific and philosophical truths. They are then bound to come into collision with the universities or rather to regard these as aiming at them, for while the university is conservative of the truth, it is constantly changing its form. In proportion as men's views of truth are particular and accidental, the university must seem to them revolutionary and destructive; while they are crying, Lo here! Lo there!, science and philosophy say, Lo everywhere!; for these, only that is sacred which is universally significant and worthy of the most exhaustive study.

Though such a spirit is the end of philosophy, it is not to be made a permanent possession by beginning at the end; large conceptions are not got by attacking broad subjects. The university standpoint is reached through a strait and narrow gate, the laboratory method, based on the principle that the universal is found by analyzing the particular, rather by a minute study of a small piece of reality than by much travelling through other men's opinions. In the library, the books which bring us nearest to the reality are the best; in history, where the event cannot be reproduced by experiment or illustrated by specimen, we want to know just what happened and the most faithful reporter is the most valuable historian. Besides the cyclopædic works of the synthetic philosophers, the literature which characterizes the working library of a university is of the monograph type; this is why more books in German are received at the Harvard library than in any other language, not excepting English. The monograph gives a detailed account of a particular case, perhaps of interest to but few persons, but worth much more to these than would the same amount of ability and labor spread over a large area. It is upon the study of things themselves that any authority of the specialist rests; there is no magic in time or place; the same methods and the same independence work the same results anywhere, if carried to the same extent that the university affords. Any real University Extension must mean not so much a general diffusion of the results of university research as a popularizing of that

research itself, setting people to study and observe and experiment in the methods of thoroughness and the spirit of freedom, which make the university worth extending. The schools are coming to see the delusion in separating the young mind from reality by a wall of books, — books on science before they have found out anything for themselves, books about literature instead of that literature itself, so that they remain forever satisfied with getting their knowledge at second-hand.

The Spirit of Art. In modern times, the university spirit has reached its highest development in Germany; in ancient times, in Greece. If in Germany its intellectual aspect, in Greece its æsthetic side was most prominent. The true modern Greeks are in the universities; side by side with philosophy, there grows a passion for the beautiful, for fitness and harmony, which is often unrecognized because of its very intensity; unable to find realization in its surroundings, it often turns inward to satisfy itself in the harmony and perfection of thought.

At Harvard, the æsthetic spirit is not confined to the Department of Art. In a university, that has developed so naturally that business and theology, science and philosophy understand and supplement each other, there is a pervading tone of culture and propriety. It is human weakness that fails to hold in balance the good, the true and the beautiful; culture, which has grown on a soil of the industry and morality may last after these have declined and may become associated with luxury and vice. We are still affected by the traditions of a time when to wish to be beautiful and to look at beauty was held to be immoral. In Harvard University, æsthetics and ethics are met together; culture and morality have kissed. Beauty, which many are half ashamed to admire, in the university is consciously sought and rewarded; in athletics, it is the beauty of health; in language, the beauty of fitness; in science, the beauty of order; in morals, the beauty of temperance; in religion, the beauty of the whole of these.

The greater the competition, the more elements enter into its selection; where there is a general excellence in scientific attainment, attention begins to turn to the form of expression. The competition at Harvard for honors and prizes leads to a very high regard for the form as well as the matter of every production. Elegance of expression if developed early may take the place of originality of thought, and often marks the decline of this; but

every year fresh blood brings new vigor and instincts to the University, and competition prevents the neglect of either element of excellence.

The Spirit of Sociality Where so many are brought together in an institution, they are never brought together socially; there is no time and place at which all even in the College of Harvard meet. But the sociality is increased by this, for many smaller circles are formed on more congenial and intimate interests. The society of a large university is that of a city; the student who wants to know the official announcements consults the weekly calendar; if he cares about undergraduate irregularities and the gossip over them, he reads the newspapers. The people who see the papers know a great many things about Harvard, of which the busy student never hears.

The most effective social bonds between teachers and students are those which have method in them and are based on professional interests. A mere idea that it would be a good thing for them to come closer together than in a lecture, has small results. At one end of the course, special students and Freshmen have each an adviser, who, if not visited, calls upon the student; at the other end are the seminaries for special research and department conferences of a more social character; but the graduates can hardly be brought together without something definite to hear or say, usually an informal address by some teacher followed by questions and discussions, which are continued over the refreshments.

Specialism in study brings teachers and students more on an equality, where they are all pioneers together; here is always room for authorities but none for an autocrat. No one is expected to know more than he can know well, but that much is at the service of all. This is one of the noblest features of the profession of teaching, that its highest representatives are enabled to give their best to every novice who is seeking to learn. This renders the profession, both as to the worth of what is given and the spirit in which it is done, second to no other.

The Spirit of Morality and Religion It is frequent to associate, these two aspects of thought and conduct so as to confuse them. In a university where both ethics and theology are taught as differentiated and united in philosophy, these subjects are distinguished in theory and thus more properly united in practice. The moral spirit is valued as it gives a strenuous tone to work; the religious

spirit, as it pervades the machinery of life with inspiration and enthusiasm. No one here has his morality or religion judged by his ethical or theological theories. It is taken for granted that the man who fulfills the highest demands upon the teacher is both moral and religious in the highest sense of the words. Here the teacher is judged by the requirements of his own profession and thus it is possible to raise those requirements higher than they would be if he had to conform to the standard of some other vocation. When good men differ, they are compelled to seek their common ground, the essential truth which they both hold, so that they can agree to disagree; it is thus that university life, with its specialization and differentiation results in driving men to broader and deeper aspects in every direction where thought finds significance, to a real harmony of scientific, philosophical, and religious truths. In the interests of religion and morals, the university believes that it should preach only what it is willing to practice, that religion is not to be administered as an adolescent prophylactic, that compulsory prayers for students and not for teachers would be only pedagogic hypocrisy. Harvard avoids the extremes either of no religious service or of compulsory attendance. Prof. F. G. Peabody says of "Religion in a University" (Harvard, Mo., May 1888), that "the voluntary system is a twofold act of faith. It is a faith in the power of religion, and it is a faith in the impulses of young men. * * * The system of privilege assumes two things: that religion, rationally presented, can hold its place among the competing interests of the time, and that the hearts of young men are naturally receptive and responsive to its call. It is content with the position of one dignified department among the many departments of university life."

PROMOTION OF PUPILS.

N. H. WHITTEMORE, PRINCIPAL OF THE HARRIS SCHOOL, BOSTON.

THE responsibility of deciding who shall be promoted, is one which the principal of a school classes among the unpleasant duties of his position; often the weight of it is so grievous as to seem hardly bearable. Particularly is this true if the head of the school be a person of amiable traits and easily moved by the earnest requests of indulgent parents, or the importunate pleadings of lachrymose pupils.

Doubtless there have been teachers who have almost wished they had chosen a different occupation, when from a clear sense of duty they have been compelled to say "*no*," although the word "*yes*" would have been far pleasanter to utter. Yet the wisdom of their decision is often questioned and the disappointed frequently appeal to higher powers who, although desirous of smoothing over the trouble generally, so far as the writer has observed, sustain the action of the teacher. And why should they not? For who is in a position to regulate more wisely, or desires to manage more justly the promotions in a school than he who daily watches over its interests?

When the cases of non-preparation are so clearly defined as to admit of no doubt, then indeed, the question may almost be said to settle itself; but when the conditions are such that the teacher feels undecided, "then comes the tug of war," and, whatever his disposition of the matter may be, he will very likely almost condemn himself for not having decided differently.

It may be asked, "what shall be a proper ratio of the non-promoted to the promoted?" This is not an easy question to answer, for it would seem as difficult to establish a rule applicable to all the schools of a city, or to the same school for successive years, as to prescribe a satisfactory uniform diet for different people, or for the same person at different periods of life. The conditions of schools in different parts of a city are very unlike, particularly as regards the material of which they are composed, and while it is true that neither wealth nor nationality measures brain power, both may influence somewhat the cultivation of the same, and so the possibility of securing even an approximate uniformity in promoting seems hopeless.

But supposing the question above mentioned be limited to one school, instead of a system of schools, the answer is not even then readily given, for it has been frequently noticed by the writer that some classes are more evenly graded than others, and, such being the case, rather than have the evil continue, a halt must be called somewhere, hence, the necessity of weeding out, and what may be a proper ratio of the promoted to the non-promoted in one class, may not be so for another class.

If classification means anything, it means just this, otherwise the object of graded schools is entirely aimless. In connection with the matter of promotions there are four interests to be con-

sidered, viz: that of the pupil, of the parent, of the school and of the school system.

It would hardly be an economical use of time to discuss the relative importance of these interests, and yet there is a possibility that so much prominence may be given to one of these claims that the others may be almost ignored; but this would not occur often in a school in charge of an experienced teacher who recognizes the axiom "that the whole is equal to the sum of its parts."

It is sometimes maintained that pupils are kept back "for the good of the school." This is undoubtedly true and entirely justifiable, for what is "the good of the school" but the total of the good of the individuals composing the school? In consulting the good of the school, what does a wise principal do, but endeavor to administer its affairs so as to produce "the greatest good to the greatest number?" How can a principal *really* consult the good of the school and not consult the good of its pupils?

It is possible, doubtless, for a principal to become morbid regarding the rank of his school, and he may be so influenced by a narrowing spirit of rivalry towards some other school or schools, as to attach undue importance to percentages in reports and thus may be unjust to individual pupils, but if he is, does he then consult the good of his school?

On the other hand, the opinion prevails that in promoting pupils, scholarship rather than age or size is the important requirement. If, then, regardless of this, a principal allows poorly prepared pupils to be promoted, he does not consult either the good of the pupils or of the school.

On the supposition that there be a real danger that a principal may consult too much the good of his school, why may there not be a similar danger that, in the endeavor to secure uniformity in promoting pupils in different schools or uniformity in other respects not more essential, the good of the *school system* may be unduly magnified? If the point be well taken in the one case, why not in the other?

To dispense with generalities and come down to facts, the writer would state that once he allowed an entire class, in which were a number of deficient pupils, to be promoted. This was done in opposition to his better judgment, and because there seemed to be quite a number of pupils who were *pretty evenly*

unprepared, and it was hard to discriminate, and so, in desperation, all were advanced, as they were, old, large, and lazy. The harvest at the end of the year was not abundant, and the following year a different policy was adopted, permitting a goodly percentage of "stay-overs" to exercise a stimulating influence on others. Possibly other teachers may recall a similar experience.

The desire to have the percentage of graduates large in proportion to the enrollment should not influence the principal very much in regulating promotions. Such percentages must vary yearly, for let a wave of measles, or a succession of them roll over a school district and it will affect the attendance, the scholarship, and of course, the number of the promoted, and nobody is at fault. Like all questions, this looks different when viewed from different standpoints. One who has never had a teacher's experience cannot know all the difficulties to be encountered.

The inexperienced may have settled convictions regarding the proper way of driving a spirited horse, of sailing a vessel in a gale, or of even soothing a little refractory child in church, but, after all, nothing will cause the scales to drop from their eyes more effectually than to put their theories to a practical test. The same with school questions.

It will not conflict with what has already been said to state that, while the principal is properly the arbiter in deciding the promotions, he must necessarily rely greatly on the judgment of his subordinates, who, from their closer relations to their pupils, know far better than he can who have properly done the year's work and earned promotion. Test examinations by him will assist to a moderate extent, but the year's record is a better guide.

Errors in judgment will occur, as no teacher is infallible, but mistakes in promoting too many are more common than in promoting too few. It is germane to the topic under consideration to allude to that bone of contention which has been fought over here annually with more or less vigor. I refer to the evil of allowing pupils in our second grammar classes to play leap-frog over the heads of their more scholarly classmates, and to land triumphantly in the high schools. However, the leveler Time usually shows these misguided youth the unsatisfactory results of such surprising agility. No permanent benefit can come to one who, without suitable preparation assays to gallop up the hill of

science. May the time come when we shall see the last of this annoyance which is a positive injury to both high and grammar schools.

Occasionally there are bright pupils who can take a double promotion, and also there are some who possess good brain power, but are somewhat hampered by circumstances beyond their control, but who, if promoted, may give good account of themselves and rank high before the end of the year. Such exceptional cases exist in all schools and receive, or should receive, the consideration they deserve.

To recapitulate briefly, allow me to refer to the unpleasant duty of refusing promotion; to the almost resistless force of the pressure of parents and others, which the head of a school must meet; to the difficulty of regulating uniformly the promotions in different schools or in the same schools at different times; to the four interests involved in the question; to the fact that the good of the school is the sum of the good of the pupils; and that there can be no more danger of consulting too much the good of the school, than of consulting too much the good of the school system; that intelligence and faithfulness rather than length of years or excess of avoirdupois should be the criteria for promoting; that too much importance may be attached to percentage of graduates to enrollment, and that various causes will affect the number of "stay-overs."

EARLY YEARS OF WHITMAN COLLEGE.

EX-PRESIDENT A. J. ANDERSON, PH. D.

WHITMAN COLLEGE is the outgrowth of the early Indian missionary labors of Whitman, Eells, Walker and Spaulding, and their equally faithful wives. The idea of such a school originated in the brain and heart of Rev. Cushing Eells, D. D., as a fitting memorial of the Christian life and martyrdom of Dr. Marcus Whitman. The best account of its inception is the following from the pen of Rev. Myron Eells, D. D., first published in a volume on Indian Missions, printed by the American Tract Society.

"In 1859, very soon after the country east of the Cascade mountains was declared open for settlement, Rev. C. Eells, one of the early missionaries of the A. B. C. F. M., turned his eyes toward Walla Walla. He soon purchased of the Mission Board in Boston, their right to the mission claims at Wailatpu, where Dr. Whitman and his associates were massacred. This was the residence of himself and family most of the time from 1860 to 1872.

"The great grave of Dr. Whitman, wife and nine others who were killed, was in sight of his house, and the memory of his deeds was in his mind. He and others felt as if a monument of stone ought to be erected over the grave, yet he believed that if Dr. Whitman could have anything to say about it, it would be that the best monument would be a high school of earnest Christian character, for the benefit of the youth of the valley. Hence a charter was obtained from the legislature of Washington territory of 1859-60, and a board of trustees was appointed, two of whom were early missionaries to the Indians. The way then not being open, little more was done. Mr. Eells, however, in all his varied labors, kept the idea of a school continually in view, until in 1866, when subscription papers were circulated, a site of four acres donated by Messrs. D. S. Baker and J. F. Boyer, on certain conditions, and steps immediately taken to erect a building twenty-six by forty feet, two stories high. It was built during the summer, and so far finished in the fall, at a cost of $4,842.42, as to be dedicated on the 13th of October, and was open for use a few days afterwards. The cost was not all paid at that time, but when it was paid, it was found that Mr. Eells had given $2,900, including interest. Since then he has given $1,750 additional to the seminary, making $4,650 in all."

Rev. P. B. Chamberlain, who had been active in securing a change of location of the proposed school from Wailatpu to Walla Walla, was the first principal of Whitman Seminary, in which capacity he acted six months from the fall of 1866. Rev. Cushing Eells succeeded him, and continued to act up to June, 1869. It is handed down, that when Father Eells resigned as principal, in 1869, he paid his assistant teacher the proceeds of the school, going without the greater part of his own salary. The seminary was closed during the year 1869-70. In the autumn of 1870, the board employed Prof. W. W. Freeman, a professional teacher, who continued in charge about seven-eighths of the academic year. In the fall of the year, 1871, P. B. Chamberlain was again secured, and kept the school in operation about three-fourths of the year. Mr. Chamberlain is said to have conducted the institution during his second term for the tuition receipts.

From 1872 to 1880, the trustees, feeling their financial inability to pay competent teachers, acted on the policy of allowing any teacher of standing to use the building for maintaining a school therein, upon his own risk and responsibility. Among the principals of the seminary were Rev. D. E. Jennings, Professor Crawford, Miss Simpson, Prof. Wm. Marriner, Prof. W. K. Grim, Prof. Horace Lyman, his son, W. D. Lyman, Prof. J. W. Brock, and Professor Rodgers. Among the teachers included in this list, were able and enthusiastic men who started in to found an institution of secondary and perhaps eventually of higher learning. Some failed in executive ability, and doubtless all of them because

the times were not ripe for such an undertaking. Yet the seminary did an important work for the youth of the valley.

December 7, 1880, the board of trustees held a meeting, at which Rev. G. H. Atkinson, D. D., and H. E. Johnson, B. S., (of Harvard), were elected trustees. At the same meeting, Dr. Atkinson, was appointed financial agent to obtain funds for the use and benefit of Whitman Seminary. Soon afterwards, Dr. Atkinson was in Boston, where he met the officials of the American College and Education Society, and received from them the assurance of a hope that the society would be able to help the institution as soon as it should have a Freshman class. June 28, 1881, after a report from their financial agent, the board of trustees passed a series of resolutions, presented by Dr. Atkinson, and determined to procure a suitable principal and lady assistant, for the academic department, at not less than $1,500 per year, for both teachers. Rev. Mr. Beach and wife were employed, and entered upon their work in September following. And although excellent instruction was given, especially by Mrs. Beach, — an instructor of many years' experience — still came the old story that the tuition fees fell short of paying expenses, and the people were called upon to make up the deficit.

In the latter part of the year, 1881, Dr. G. H. Atkinson, by authority of the board of trustees, addressed a letter to the writer, then president of the Territorial University, at Seattle, inviting him to the principalship of Whitman Seminary. The latter replied, declining the invitation on the ground that the seminary conducted as an academy, without endowment, could not be successful, but stated that if the trustees contemplated changing the seminary to a college, and could secure the adoption of the institution by the American College and Education Society, and the people of Walla Walla were disposed to do their part financially in founding a college, he would give the matter favorable consideration. Dr. Atkinson replied that the college society directors said in 1880 that they hoped to be able to adopt the institution when it should have a Freshman class, and that the trustees and other people of Walla Walla assured him that if a good school were established in the city, funds and buildings would be forthcoming as fast as needed. The result was that the academic department of Whitman College opened in the original seminary building, repaired and refurnished, September, 1882,

with three teachers and a large number of students. The first year proved a success, financially and otherwise. A Freshman class was secured during the year, and the American College and Education Society placed Whitman College upon its list for aid and endowment in April, 1883. Thenceforward, to the present time, its history has been one of remarkable progress as compared with the early days of the oldest and best colleges in our country.

Two acres of land have been added to the campus. Important amendments were made to the charter by the legislature of 1883. The charter of 1859–'60, limited the capital stock to $150,000, gave no authority to confer degrees, and permitted no exemption from taxation. Under the amended charter, the college is not a joint-stock corporation, its faculty has authority to arrange courses of study, such as are established in any college or university in the United States, with full power to exercise authority over students when necessary, even to suspension and expulsion, and its board of trustees have control in all general and financial affairs, confer such degrees as may be recommended by the faculty, and have absolute power to appoint and remove a president of the college, professors, instructors or other officers. Also all college property is exempt from taxation.

Three college buildings have been erected: College Hall, in 1883, at an expense of $16,000, including new furniture, worth $1,000; Ladies' Hall, in 1884, at a cost of some $8,000, added to the cost of the old seminary building which now forms a part of the hall; Gentlemen's Hall, built in 1888, costing nearly $1,400.

A laboratory, with physical and chemical apparatus, arrangements and appliances such that a dozen or more students may perform experiments at the same time has been added. Also a museum, or cabinet, containing many specimens of the flora and fauna of the Pacific Northwest, and quite a number of exchanges from foreign nations and from other parts of our own country; pianos and organ for the music department, and models for the art department; also a working library of nearly four thousand bound volumes and more than two thousand pamphlets.

In 1882–'3, the first year of attempted college work, there was but one Protestant Christian student in the school, while in 1890–'91, the ninth year, there were fifty-seven. The total attendance the first year was ninety-one students, and in the later years nearly two hundred. Of the twenty-two college graduates,

fifteen were professing Christians at the time of their graduation, and of the twenty-six who completed the three years' normal course, twenty were members of churches when they graduated. Quite a number of these were converted during their student life at Whitman. Up to this date, but two of the classical graduates have chosen for their life-work, the gospel ministry. One of them is pastor of a church in Wisconsin, and the other has entered upon a course of theological study at Yale University. Many of those who were students of the seminary, prior to the beginning of college work in 1882, are active, enterprising citizens in different parts of the Upper Columbia Valley and along the entire Pacific coast. All who have gone forth with diplomas have shown themselves to be honorable, able and faithful workers. Some are in eastern professional schools, post-graduate courses, or other equally commendable labor, and many who, from some necessity, were unable to complete a course of study, are to-day doing valuable service and exerting a healthful influence in this far West. The college has a promising field, and must constantly grow stronger for truth and right in this new land.

My last official act as president, was to legally complete, with the American College and Education Society, a covenant, by which Whitman College will hereafter receive larger sums of money from the eastern field, and thus allow a more vigorous growth than during the last nine years, which has been emphatically a period of laying foundations, establishing landmarks, and of up-building of every kind and description, with inadequate means of support.

If Whitman College is to prosper in the future, as it ought to prosper, the people of this city and valley, who have abundant means, must give in large-heartedness as God has given to them. During the nine years of my administration, the people of this region gave to the college, $21,500; benevolent givers of New England, donated $33,000, and $43,000 came into the treasury as tuition fees. But this combined sum of $97,500, of which $66,000 was used to pay current expenses of the necessary educational work, and the remainder became endowment, erected buildings, purchased furnishings, supplied appliances of instruction, paid insurance, etc., etc., is but a beginning — but a mere drop in a bucket towards making a college, even in this far West, to-day. Whitman College must secure a suitable campus of at least forty acres

before land rises to the great value it must attain in this wonderful valley of marvelous fertility. There are various parties in this region who can make money by donating one hundred acres of land in one body to Whitman College. Benevolent givers of New England expect something of this kind to be done.

May God make Whitman, — not its wooden walls, not its brick walls, nor its granite walls, but the good meaning the name now has and all the good meaning the name shall ever come to have,— imperishable.

EDITORIAL.

HON. HENRY SABIN, whose work while at the head of the department of Public Instruction for Iowa has commanded the hearty approval of all the best educators of the land, now enters the field of journalism. The management of the *Iowa School Journal* is to be congratulated on securing a man of his calibre to edit that paper. His scholarship and ability are of a very high order. He knows the teachers of Iowa and their educational wants, and it will now be his joy to serve them and furnish to them the best mental stimulus. We expect his pen to be one of the most puissant in the whole educational field. Welcome and success to Editor Sabin.

WE think it was Macaulay who said, that scholars who become experts in unusual fields of investigation invariably exaggerate the importance of their acquisitions. We have been reminded of this tendency by the appearance in the field of historical investigation of the Rev. Dr. Griffis, a clergyman in Boston, who seems impressed with the mission to magnify the importance of the people of the Netherlands in every progressive movement of British and American civilization. It has always been understood and acknowledged by the most inveterate Yankee, that the "Dutch took Holland," and for a brief period kept it in the fore-front of European life. Boston has contributed, in its great historian, Motley, to the magnifying of this interesting period, and the delineation of the grandest actors in the inspiring drama of the Rise of the Dutch Republic and the history of the United Netherlands. But Dr. Griffis, fresh from his researches in the old fields of eastern New York, is not content with this measure of honor; but seems to insist that not only were the New England Puritans indebted to their few years' residence in Leyden for about all of push and pith that launched the realm of "Down East," but that Eng-

land itself is largely indebted to the advent of a hundred thousand Dutch operatives and mechanics for the revolution that left Charles the First headless, exalted the great Commoner, Oliver Cromwell, and gave to the British people that prodigious impetus that led Guizot, less than half a century ago to declare that only England had a constitutional history to be written. Of course we shall all be obliged to Dr. Griffis for any further investigation of the conflicting authorities in this domain of history, or for any suggestive marshalling of facts bearing upon the evolution of New England. But we remember that in his special field of "claiming the earth" for the Dutch, he will find himself at odds with the resolute brigade of German historians, pushing the cause of their countrymen as the authors of American civilization; of the Creole historians of Louisiana, who regard the United States of America as a sort of penumbra of the French settlement of Louisiana; to say nothing of the more sensible claim of old Scotia, which certainly has done a big stroke of work this side of the water. Mr. Thomas Nelson Page has no lingering doubt that "nature never made but one such man, and broke the die in making" — the old Virginia gentleman — whom the late Mr. Bagley pronounces the final effort of the Deity. Certainly, just now, on the old Dutch stamping ground of Manhattan Island, the lively Irishman will join issue with Tammany at his back, with Dr. Griffis' eloquent eulogy of his chosen people at the late Dutch banquet in New York.

OF course, that peculiar conglomeration of elements we call the Anglo Saxon race is indebted to several strains of Northern European blood for the special quality which gives the British Empire and the American Republic the leadership in free constitutional government to-day. But we fancy it will be necessary to go farther back than the advent of a hundred thousand Dutch mechanics in the England of three hundred years ago to get at the hiding place of Anglo Saxon power. Hallam declares that, long before this, every essential right for the Englishman had been secured. When we scan the cold facts of the brief residence of the English Puritans in Leyden, we are at a loss to understand how everything that has made New England what it is was caught in Leyden. Certainly the Scotch system of public education, at home, was far more suggestive than the schools of a foreign people, inaccessible from difference of language to the children of this little band of strangers in a great and wealthy Dutch city. There was more than enough in the passion for local self government in England to suggest the New England township. It was as natural that the new English authorities in New York should refuse to support the public schools of the Dutch settlers, taught in a foreign language, and

implicated with an obstinate sectarianism, as that Massachusetts, to-day, refuses to accept a French parochial school as the fulfillment of her educational legislation. But the test in all this conflict of claims is the power of these rival elements to sustain themselves in the battle of American civilization. The Dutch of New York, the French of Louisiana, the German of Pennsylvania, the Scotchmen and Presbyterian Irishmen of the old time, have all doubtless contributed valuable elements to American civilization. But American civilization is neither Dutch, nor French, nor Irish, nor German, nor Scotch, nor Spanish, nor Scandinavian. In all its essential features, it is the logical outgrowth of the great British people. The British and American Anglo Saxon man is the only man in modern times who has developed the genius for free constitutional government. With all their magnificent qualities, no continental European people, save the French, is in sight of constitutional free government, while the United States, the Dominion of Canada, and Australia, the latest comers into the field, are already on the high road to success in that supreme achievement of mankind. The British and American Anglo Saxon people alone has shown any persistent ability, on a large scale, to civilize the lower races; and the hope of the negro and the Oriental is garnered up in the direction of that stupendous educational executive power. It has been said of the most accomplished critical statesman in the Senate of the United States, "he can see a crack in a barn door better than any man in the Senate; but he generally fails to see the barn." Dr. Griffis seems to represent the same excess of microscopic critical ability in his estimate of the making of the two Englands. He sees and doubtless can tell us a great deal of interesting truth about the people of the Netherlands. But somehow, in reading his fervid eulogy, we lose sight for the time of the British Empire and the American republic, — as a man can shut off a view of the Himalayas, the Andes, or the Rocky Mountains by holding a new "silver dollar of the fathers" before his eyes.

WE note with satisfaction that the wide-spread discussion and general condemnation of the senseless and barbaric customs of the D. K. E. Society of Harvard College, which William Lloyd Garrison set in motion, has had its effect upon the overseers of Harvard and upon the young men who are members of the society in question. The voluntary agreement of the leaders of the latter to suppress hereafter the worst features of this society, doubtless, alone saved it from extinction. We also hope that President Eliot and the faculty, will in future exercise a more restraining influence upon the wild and reckless element in that great institution of learning. Freedom should not be permitted to degenerate into license and unbridled lawlessness, even at Harvard.

THERE has probably been no time in the history of the magazine when new names were added to the lists so rapidly as during the last few weeks. To all of these new readers we extend a most cordial greeting and assure them that we will do our best to make the monthly visits of EDUCATION fully meet their expectations.

A GREAT struggle is going on in Louisiana. All the forces which make for uprightness, morality and righteousness are there arrayed against the forces of evil which uphold and defend the lottery. This is not a state; it is a national affair. The ramifications of this accursed thing, reach the remotest hamlets of the North as well as the South, of the East and the West. Its hope in the impending contest lies in its hold upon the viler elements of society and its ability to corrupt the poor and ignorant colored voter by the free use of money. The opponents of the lottery need the effective support of all the good people of the land. The press and the pulpit are denouncing this terrible evil. Let all the educators of the land use their influence in the same direction. The mighty voice of the people can enable the better element of Louisiana to destroy this deadly evil.

PRESIDENT ELIOT of Harvard University is "at it again," in his persistent attempt to discredit the American Common school. A dozen years ago he led the attack on the support of the secondary and higher education by the State; a movement that, like many another, "impending crisis," in American affairs, has run its course, without closing the doors of a single high or normal school or a state university, rejected by the common sense of the great educational public that, in matters educational, still leads the American people. Of late the accomplished president has again come prominently before the public in the attempt of a class of university men to reorganize the grammar school grade and with it the high school in the interest of an earlier preparation for college life. The superior acquirements of the German and French boy of fifteen in the direction of college studies are paraded, with significant ignoring of the idea that the American boy is studying the environment of American life as a preparation for American citizenship, and, with all his zeal for learning, cannot be persuaded that "going to college" is the "chief end of man." The fact that the young subject of the German Empire, however accomplished in letters, must come to the United States as his final university of manhood, is a fair answer to this claim of early scholastic superiority. President Eliot has been unfortunate in several of his recent criticisms on the grammar and normal school work of our leading communities, as has been abundantly shown by the principals of schools in his own state and city. If rightly reported, the President has recently announced

that "the time when in this country the public schools were best, has gone by." The point made is the old charge; — that the common schools aim "to turn out a uniform product in a fixed number of years, and the needs of superior minds are sadly ignored." The President seems to be haunted by the idea of a personal training of each child by expert teachers in every branch of knowledge, which is now the "fad" in high university quarters. Long ago he announced that the emphasis in school management should be the discovery and training of the "superior minds." Doubtless, in the true university the time has come for specializing; though even here the reign of the experts is fraught with serious perils to the mental and moral health of the student. But this criticism leaves out of account the idea of the American people in supporting every grade of the common school. That idea, from the first, has been; — in instruction and discipline, organization and environment, to carry forward the education of American children on the great common lines which lead to a broad, resolute and progressive American citizenship. The result has been the production of a population that, thirty years ago, saved the republic and with it the ultimate hope of all the highest interests of man. Thomas Jefferson's scheme of popular education, if adopted by the South a century ago, would have abolished slavery and saved the Union without shedding a drop of blood. Pray, how can this impracticable scholastic crotchet of the early specialization of instruction be realized in the common schools of a city like Boston? Now all doors are open, and the bright boy or girl can push forward from grade to grade, and reach the university as soon as is good for him. And, after all, scholastic eminence is but one element of superior manhood and may be pursued at the imminent disregard of those qualities, mental, moral and executive, of supreme importance in life. We question decidedly the president's low estimate of the comparative value of the public school. Indeed, the best things in the superior private schools and their most successful teachers are largely the outcome of the higher grade work of the common school system; especially the normal training, for which the president seems only to have contempt. President Eliot complains that "the United States is the only civilized country without a National Educational system having perfect connection among its different grades." The same criticism applies to everything American. Republican society makes sad havoc with the perfect iron-clad systems that have such attractions for the high scholastic mind. But there is a system underlying American life, of which American schooling is in many ways a representative; the idea of educating children for the independent manhood and womanhood consistent with an order of society that, in its opportunities and incitements, is the grandest university ever conceived by the mind of man.

COMPARATIVE STATISTICS OF EDUCATION.

A FRENCH publication, "les annales Nationales d' Economie et de Statistique," publishes some comparative statistics of education showing for the principal countries the ratios to the total population; of the school population; of illiterates; of persons knowing another language than their own; of persons having received a classical education. The ratios are as follows: —

(1) *School population — Europe:* Prussia, 18.25 per cent.; England, 16.2; Austria — Hungary, 11.5; Belgium, 10; France, 14.64; Holland, 14; Italy, 9; Russia, 1.8; Switzerland, 15. — *Asia:* Japan, 9. — *Africa:* Cape Colony, 23. — *America:* Canada, 21.5; United States, 20.58; Jamaica, 11; Trinidad, 9; Costa-Rica, 7; Guatemala, 3; Nicaragua, 5; Argentine Republic, 6.5; Chili, 3; Ecuador, 2; Uruguay, 5; Venezuela, 5. *Oceanica.* — Australia, 18; Tasmania, 12; New Zealand, 19; Hawaii, 11.

(2) *Illiterates.* — In Russia, Servia, Roumania, and Bulgaria, the proportion of illiterates is more than 80 per cent.; in Spain, 63; Italy, 48; Austria-Hungary, 42; Ireland, 21; in France and in Belgium, 15; Holland, 10; United States (white population) 8; Scotland, 7; Switzerland, 2.5; in the larger part of Germany, 1. In Sweden, Denmark, Bavaria, Wurtemburg, and Saxony, it is very rare to meet a person who cannot read.

(3) Proportion of persons knowing another language than their own — Germany, 69 per cent.; Austria, 81; England, 34; France, 29; Italy, 28; Spain, 13.

Persons having received a classical education. — Germany, 32 per cent.; England, 21; France, 20; Italy, 17; Austria, 13; Spain, 7; Russia, 2.

The same publication reprints from a work of Professor Conrad's statistics showing the number of students in the universities for every 100,000 inhabitants. These appear as follows: Belgium, 82.3; Norway, 76.6; Sweden, 57.3; Austria, 55.9; Italy, 51.3; Switzerland, 50.4; Germany, 48.1; Holland, 45.4; France, 42.6; Russia, 9.9.

Another curious calculation shows the increase in the proportion of students in the higher schools since 1870. In Norway this increase has been 214 per cent; Denmark, 182; France, 162; Switzerland, 160; Austria, 158; Belgium, 156; Italy, 155; Holland, 150; Germany, 148. S.

CORRESPONDENCE.

Editor EDUCATION: — How may I secure the report and small pamphlets issued by the government on educational matters? I have seen in the periodicals an occasional reference to the reports and circulars, and if possible I would like to secure copies of these for my school library and personal use.

Vermont. F. L. W.

[Write to Hon. Wm. T. Harris, Commissioner of Education, Washington, D. C. The Commissioner's reports and circulars of information are free and may be obtained on application.

Editor of EDUCATION: — Although I am a schoolman and deeply interested in educational affairs, I am yet a little puzzled as to the best course to pursue in some matters. As the head of a high school I am called on to give advice to my pupils and to their parents regarding the future course the graduates of my school are to take. The claims of business are so pressing, business has so many allurements, it promises so much and so lavishly that I have to combat a strong current which is setting towards a purely mercantile career for most of my pupils. While I urge the benefits of a liberal education and strive to set in glowing colors the value of a collegiate education, I find I am overwhelmed with the arguments advanced, not against the college course, but in favor of immediate entrance into the channels which lead up into a business career. Every year the number of my graduates that go to college grows smaller, and while most of the pupils take the regular course of instruction which fits for college or for technical school, yet few pursue the course after graduation. Now, what can I do to stem this current towards business? It troubles me very much and I am forced to believe the fault is mine, although I know the sentiment of the age is a business one. The president of a railroad is better known than the president of a college. A man is often known more by the horse he drives or the yacht he owns than by the pen he wields. How can I successfully combat this spirit of the age in my little town and create a spirit which will find in education all that is best striving for, best having? Have any of my brother teachers had to grapple with the problem? Will not they kindly tell me how they solved it?

Massachusetts. HIGH SCHOOL PRINCIPAL.

Editor of EDUCATION: —

Dear Sir, — As a contribution to the difficulty of M. F. L., as stated in the January issue of your magazine, I offer the following:

(1.) Select books that are well and *attractively* bound; that have good clear type, and that are *logically* and plainly paragraphed. (2.) Be sure that the book has a good table of contents, and a full *index*. Any book is worth at least fifty per cent less without an index than it is with one. (3.) Avoid all books that have appendices and footnotes. This is an almost invariable rule. (4.) Be sure the book is well and copiously *illustrated*, — even if it is an Arithmetic. (5.) Take no book that has questions to which answers may be found in the book itself. You will have to use a Geography with the questions already made, — but do so under protest. (6.) Try to get, if possible, a book that has numerous suggestive questions, to find the answers to which will take the student out of his text, or make him do some good thinking. There are such books in several branches, and their tribe is increasing. (7.) The ideal Arithmetic has no answers to the problems, — and no rules. But it has plenty of model solutions, and enunciation of principles, and leaves the teacher free to train his pupils to make their own rules. (8.) The ideal Civics has something more than a technical analysis of the United States Constitution. It contains in addition to simple explanations of the more important articles of the constitution, much about the practical machinery of government, citizenship, and recent changes in political methods, ballot laws, &c.

I have found these general rules very helpful in the selection of suitable texts in all branches.

Very respectfully,

Lexington, Ky. RURIC N. ROARK.

FOREIGN NOTES.

Correlation of Schools in the Scottish Educational System. — According to the report of a recent lecture by Dr. Eliot on educational changes, he charged the United States with being the only highly civilized country which has not a national educational system having perfect connection among its different grades. This leaves one in a little uncertainty as to the position which President Eliot would give England in the category of nations. The contrast between England and Scotland as regards the correlation of different grades of schools is very marked. In this respect the system created by the Scotch Act of 1872 preserves traditional relations antedating even the parish system. Recent legislation has perfected the organization which was fore-

shadowed in the Act of 1872. This recognized elementary and higher class schools provided with a course of study leading up to the universities. An Act of 1886 brought the public higher class schools under the inspection of the Department of Education. The Educational Endowments Act of 1882 had already provided for a similar inspection of all endowed schools dealt with by the Royal Commission; private schools may have the advantage of the same service by defraying the costs. To complete this feature of the system a Leaving Certificate examination has been instituted which not only stamps the standard of attainment in the case of successful candidates, but is received in lieu of certain professional examinations, and also for the preliminary examinations in Scotch and English universities. In 1890 the number of secondary schools which had been brought under government inspection was 54, i. e., 23 public; 22 endowed, and 9 private schools. The number of candidates for the leaving certificate examination was 3.120, nearly three and a half times the number in 1888.

This provision with that made within the past two years for technical instruction and the expansion and improved organization of the universities on lines mapped out by the universities commission gives Scotland an ideal system. The work of the commission it is true has not yet passed the stage of recommendation, but their draft-schemes will form the basis of actual modifications in the near future. The manner in which these schemes deal with the graduation of women should be especially noted, so far as possible they are to enjoy full university privileges, meanwhile they are to be granted degrees after attending classes in recognized institutions or under recognized teachers.

MISCELLANEOUS NOTES.

GERMANY AND AUSTRIA.

Action as to School Inspectors. — The Minister of Education, (Germany,) has sent a notice to the Provincial Councils, requesting them not to refer candidates for posts as school inspectors to him, but themselves to take the initiative in recommending suitable persons to him. "It is of extreme importance," he writes, "for the proper development of education in elementary schools, that the responsible office of school inspector should only be in the hands of especially trustworthy men, those who have proved themselves to be efficient elementary schoolmasters. This applies equally to masters who have studied in a seminary as to those who have enjoyed a university education. I expect that the local authorities will not restrict themselves to an examination to those candidates who present themselves for election, but will, without regard to expected vacancies, keep themselves conscien-

tiously informed of specially suitable candidates. The school inspections, and an understanding with the provincial school committees, will offer ample opportunity to discover such persons." This action is interpreted as a movement toward the appointment of secular inspectors.

Special Schools in Munich. — There are two "Simultanschulen"— i. e., schools in which pupils of all religious denominations are received — in Munich. The names of new pupils for all the schools were sent in a few days ago, and it was found that the number of applications for admission to these schools was so great that only a very small proportion of the candidates could be received. The masters had the greatest possible trouble in assuring parents that their children would get on very well in denominational schools.

Prize Essay on Pedagogic Pathology. — A prize of $75 for the best treatise on the lines of Professor Strumpell's lately published work, "Pedagogic Pathology," is offered by the Leipsic Education Society, the treatise to remain the property of the author. The latter is to consult all the German educational literature of the present century, and determine (1) what are the educational errors in training children mentioned and treated of by various writers; (2) what is said respecting the nature and peculiarities of such errors; (3) what is said as to their causes and the occasions on which they occur. The material thus obtained is to be so systematized that readers may be able to form from these three points of view a clear judgment of educational progress and pathology up to the present time. The method of treating the question is left entirely to the author, and the prize is to be awarded by a committee of three members chosen from the Leipsic Educational Society.

Attendance upon German Universities. — The statistics of attendance upon the German universities for the summer semester of 1891, show that Berlin had 4,611 students distributed as follows:—Theology, 607; law, 1,194; medicine, 1,257; philosophy, 1,553. The professors numbered 322. Bonn had 1,386 students regularly matriculated and 1,417 special students. The distribution was as follows: Protestant theology, 125; Catholic, 180; law, 354; medicine, 323: philosophy, 417. The professors and teachers of all orders numbered 129. The remaining universities show the following attendances: — Breslau, 1,342; Erlangen, 1,040; Fribourg, 1,230; Giessen, 438; Gottengen, 831; Greifswald, 834; Halle, 1,584; Heidleberg, 1,325; Jena, 675; Leipzig, 3,322; Marburg, 939; Munich, 3,551; Münster, 393; Rostock, 368; Strasburg, 917; Tübingen, 1,393; Wurzburg, 1,435.

FRANCE.

Technical Instruction in Paris is said to suffer from too much support. Too many things are taught; there are too many teachers, and the schools cost too much. The results look much better in the reports than they are in reality. At one drawing school, with forty pupils, there are twelve teachers. At another school, l'ecole du livre, which is often mentioned as a model school, there are ten teachers for theoretical, and twenty-seven for practical subjects, drawing an aggregate salary of 130,000 francs. Yet few pupils leave the school thoroughly trained in the art of bookbinding. The complaint is general that pupils from the technical schools find the greatest difficulty in getting employment, and frequently have to begin their apprenticeship anew. Several, despairing of ever finding employment at the workshops, have taken clerkships, where they can at least utilize their knowledge of reading and writing. The Municipal Council, having seen the error of their well-meant efforts, are considering a reformed scheme of technical instruction, in which the results shall be more commensurate with the money laid out. The technical schools for girls are giving, on the whole, great satisfaction.

Interesting Ceremonies at the Paris Faculté. — The autumn session of the Paris Faculté of letters was opened by ceremonies of particular interest. It was the occasion of the unveiling of a bust of M. Albert Dumont, who was the most ardent promoter of the efforts for enlarging and enriching the Faculté. The opening address was delivered by M. Liard, Director of Superior Instruction, whose recent work on the Universities of France has had many readers in America. The dean of the Faculté, M. Himly followed with a brief account of the expansion of the Faculté by the addition of special professors, agregés, who now number 385. The exercises were completed by an address of M. E. Lavisse, who is one of the leaders of the reaction against materialism and sensualism now going on in France. M. Lavisse dwelt particularly upon the recent arrangements for reviving the scientific study of geography, the special building equipped for the work, the review whose publication has been started and the enthusiasm among the students. He then passed to a theme upon which he was particularly eloquent, viz., the lately inaugurated course in the History of National Art.

ENGLAND.

The school boards of England, as a rule, retain the complexion which they had before the elections. The London board is the most notable exception. The anti-progressionists have here won a majority

of eleven in a total of fifty-four. This is the largest force they have mustered since the creation of the board. The Rev. J. Diggle was renominated to the presidency without opposition. As the chiefs of the liberal party of the board, the Hon. Lyulph Stanley and Dr. Gladstone, were reëlected, the policies of the majority will have to face lively opposition. Their spirit has already been shown by rescinding the vote of the former board making the evening schools free.

The unusually dense and long continued fog that recently affected London had a disastrous effect upon school attendance. "As a consequence," says the Schoolmaster, "hundreds if not thousands of pounds will be kept in the public exchequer which should otherwise have been distributed among the schools. It has brought, too, into prominence the severity and hardship in town, not less than country, of marking all attendances however small. Free and paying schools have suffered alike; not half the children have attended, and in one of the former not a score of boys were present out of three hundred." This is one of the curious outcomes of the system which makes school income dependent in large part upon the average attendance.

BELGIUM.

The death of M. Victor Jacobs removes one of the most distinguished leaders and orators of the Catholic party. He was Minister of the Interior when this party gained its triumph in 1884, and in that capacity signed the law on primary instruction which destroyed the noble system developed by the Liberals.

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned.

Authority in the Sphere of Conduct and Intellect. H. Nettleship. *International Journal of Ethics*, January. Four kinds of authority: of law, religious bodies, society or public opinion, great men. "None of these are permanent; at any given time, the only absolute authority for the individual is his conscience or his free moral conviction. When the individual conscience is in doubt, recourse is generally had to some external authority. This ought to be the recorded moral experience of the past, as summed up by the great moral pioneers of all ages and countries."

Children and Modern Literature. H. Sutton. *National Rev.*, December. Among the children in literature, the writer places those of George Eliot as highest. "Because she took more note of her own feelings when a child, because her memory dwells more constantly on past joys and sorrows, because she is naturally more drawn to note carefully the characteristics of children, and has more opportunity for such observation than is generally

the case with men, a woman with imagination is almost certain to realize for herself, and therefore to depict for her readers, the lives of children much better than a man."

Compulsory Greek. J. B. Bury. *Fortnightly*, Dec. An extreme position in arguing for Greek. "A University is useful, because what it teaches is useless. This is the standpoint which the friends of Greek will take up if they are wise. Not that the maintenance of Greek depends on University protection, but that the maintenance of the University as such depends on the maintenance of Greek."

Crime in Paris, Phases of. Hugues Le Roux, *Fortnightly*, Dec. "During the last sixteen years, lunacy has increased in Paris thirty per cent.; two types are spreading fast, general paralysis and alcoholic insanity. It is nearly as impracticable to study the criminal on his own ground as the lion in the desert. The observer, for his part, has risks to run and feelings of repulsion to get over, while the objects of his investigation show to him all the mistrust of the savage. Here, love and charity solve the problem." Hereditary criminals are least open to reform, because in these the affectionate emotions are wanting.

Drunkenness in Norway, The Diminution of. Earl of Meath. *Nineteenth Century*, Dec. "Licenses are issued by the city, not to individuals, but to a society of shareholders, which undertakes to conduct the trade in the public interest. Neither the society nor the managers of the drinking saloons are interested in the immoderate consumption of ardent spirits — the former being paid a fixed salary, and the latter being precluded from earning a larger dividend than five per cent. The surplus is given to charitable institutions or other objects of general utility which are entirely dependent on the voluntary support of the public."

Federation, the Polity of the Future. C. D. Farquharson. *Westminster*, Dec. Looking at the federated government of the United States with the resulting peace between the states and general prosperity, the writer argues for a European Congress or International Court, modelled on the government at Washington. He would have the colonies brought under this control or made independent. "If it was an absurdity for the imperial parliament to vote the money of the old North American colonies in aid of the defence of the empire, including those colonies, what is it for a self-governing colony to vote that we shall wage war on a neighboring state or buy out her treaty rights for the colony?"

Flowers and Forests of the Far West. A. R. Wallace. *Fortnightly*, Dec. In a trip through the United States, the writer was most impressed by the "big trees" of California. "Unfortunately, these are within the power of man totally to destroy. Let us hope that the progress of true education will so develop the love and admiration of nature, that the possession of these trees will be looked upon as a trust for all future generations."

Folklore Congress, The International. *Antiquary*, Nov. Report of meetings held in London in October. Mr. Andrew Lang, the president, said in his address: "I do not believe that some one centre of ideas and myths, India or Central Asia, can be discovered; I do not believe that some one gifted people carried everywhere the seeds of all knowledge, of all institutions, and even the plots of all stories. The germs have been everywhere, I fancy; and everywhere alike, the specialty of race contributes the final form. In perfecting, not in inventing, lies the special gift of special races."

French Politics. Gabriel Monod. *Contemporary*, Dec. Owing to the conservative and conciliating conduct of Pres. Carnot and his cabinet, the Republican government has become more settled than is usual in France. The Boulangist fiasco and the turn of the Catholic party toward the present government have weakened the Conservative party. "If the present ministry has lasted longer than the rest and may last longer still, it is not so much because it is better than they were or because Parliament is more happily constituted; as because public opinion is simply weary of change and disposed to go on without it as long as possible. A strong protectionist sentiment has set in, partly owing to the national sentiment aroused by the war."

Gaelic Historical Songs. *Scottish Review*, October. "Far more has been done to familiarize those who are not Gaelic readers with the prose literature than with the poetry of the Gael.

Everyone who undertakes to render Gaelic verse into another tongue feels that his texts suffer sadly in the process. The Gael naturally explains this as a proof of the superiority of his own tongue, but the reason is that all Gaelic verse depends far more on its form than on its matter; the thought may be as trifling or trite as possible, but if there is harmony of sound, the Gael is satisfied. The recurrence of a vowel sound makes more impression on him than the deepest thought. There was no distinction of poetry and song in national Gaelic poetry. Poems intended to be read are a foreign importation. These poems are more strictly biographical than historical. The bard feels an immediate and personal interest in the agent: he rarely shows much appreciation of the value or consequences of the act. Gaelic poetry is the glorification of the chief and of clanship."

Grand Army of the Republic, The. *Macmillan's*, Dec. "Cruel as the American war was, and terrible as were the losses it involved, it yet brought out in a way, unsuspected even by themselves, the true fibre of the American nation. Suddenly they were brought for the time into the ranks of military nations and the world learned that the new English fighting blood was no degenerate scion of the old. War brings the poetry into the history of a nation."

Hypertrophy of the Conscience. *Spectator*, Dec. 26. "Girls or boys with an 'enlarged conscience' are almost always anxious about what they ought to do, but are generally uncertain what it should be, and even when they are certain are very apt not to do it. This is the result of a too liberal use of moral stimulants. The more we indulge in the luxury of fine feelings which lead to no practical consequences, the more we quicken and enfeeble the moral pulse, and the more we substitute palpitations of the conscience for that steady driving power which should send a calm, prompt spirit of resolution through the whole structure of the character."

Industrial Provision for Old Age. *London Quarterly*, October. "The proposal of Mr. Howard Vincent, that 'the sound principles of provident insurance should be included in the subjects prescribed by the Education Code for instruction in elementary schools' seems by no means unreasonable. The dislike of the working classes for the workhouse seems largely due to the fact that its inmates are herded together and governed by strict rules. If every wage earner over sixty-five, who had saved enough to purchase an annuity of 3s. a week, could be regarded by the State as a 'labour pensioner,' and if some of the expenditure on workhouses could be devoted to the erection of small cottages to be occupied, either rent free or at a nominal rent, a considerable help would be given to the promotion of industrial provision for old age."

Labour, Wanted a Department of. Robert Donald. *Contemporary*, Dec. "What is wanted to avert a wild plunge into a socialistic morass is the machinery to carry on a system of statistical research, directed first against the more virulent social maladies. American Labor Bureaux have reported on all the subjects which Mr. Booth has investigated. To Americans belongs the credit of having invented Bureaux of Labor Statistics. There are now twenty-six State Labor Bureaux in the United States, and a Labor Department at Washington, collecting facts bearing on the social, moral and material condition of the people. Massachusetts was the pioneer, and Colonel Wright the creator of the present system. Three methods of getting information: (1) by blank circulars through mail; — but little information got in this way; (2) by public hearings before legislative committees; much information, but unclassified and incongruous; (3) by visits of agents with lists of special questions; — the best method."

London Teaching University, The Charter for a. Karl Pearson. *Academy*, Dec. 19. The writer opposes the proposed Albert University as sectarian, drawing its teachers from King's College, and as unworthy the metropolis of England. He ridicules the objection made to it by some that it does not embrace the University Extension Society. "Their scheme, as remodelled by the committee of the London Extension Society, becomes a gigantic night school with peripatetic teachers and the inevitable magic lantern."

Milton's Macbeth. J. W. Hales. *Nineteenth Century*, Dec. Milton, at one time, proposed to write a drama on the story of Macbeth; he had two reasons for trying to improve on Shakespeare; the Paradise Lost shows

that he was a literalist in history, for he follows the Biblical account closely, and a dogmatist in theology. "Shakespeare dealt with the problems of free will, involved in Macbeth, as infinite mysteries; Milton deals with them in the spirit of a dogmatist. He holds a brief for the Almighty, as he conceives Him, and is perpetually defending Him from the charge of undue severity. He was persuaded that Shakespeare had not enough emphasized the wilfulness of Macbeth's ruin."

Mistletoe Bough, The. *Cornhill*, Dec. Primeval man adored the spirits supposed to animate the trees which were of use to him; in the winter forest, the green mistletoe gave him the idea that the spirit of the forest was in this. The mistletoe was important in Druid worship, and was carried over into Christian ceremonies. Kissing under the mistletoe is probably a survival of the ancient Saturnalian freedom.

Originality, The Decay of. C. B. R. Kent. *National Review*, Dec. Uniformity results from sources of three kinds: political, economic, and educational. In politics, the people elect representatives of their own ideas; in an ideal democracy, the elected governors would instil new ideas into the minds of the people. The present commercial state and method of trading is hostile to individuality; small industries are crushed out; machinery tends to uniformity of pattern. In education, tendency to study the subjects that "pay."

Outcasts of Paris. E. R. Spearman. *Westminster*, Dec. This year the popular excitement has been the social question. "France is neither Protestant nor Catholic, and its institutions are mere makeshifts of war time; for it is in a constant state of siege over the fundamental bases of its society. It is only in such a city as Paris that the seamy truth beneath the false veneer of our civilization strikes us in all its stern reality. The many refuges opened were crowded all the time."

Shakespeare and Modern Greek. J. S. Blackie. *Nineteenth Century*, Dec. A metrical translation of Hamlet by Polylas, a Corcyrean scholar, calls forth this article. "Modern Greek is in no sense and taken as a whole a barbarous corruption of the classical Attic dialect, but rather a natural modification, a dialectic variety, like the ancient Doric and Aeolic, with certain noticeable losses, but not without points of graceful attraction peculiarly its own."

J. P.

AMONG THE BOOKS.

Macmillan & Co., publish a booklet, TENNYSON FOR THE YOUNG, with introduction and brief notes by Alfred Ainger. In these 120 little pages are packed most of the choice poems of this great poet. Many of these will serve for declamations, and all are of interest and stimulus to young minds. The price, 35 cents, places it in the reach of all. For sale in Boston, by Willard Small.

A DEFENSE OF POETRY, "the only entirely finished prose work Shelley left," has been carefully edited with a lengthy introduction and abundant notes by Prof. Albert S. Cook of Yale. Shelley had rare genius and the editor is undoubtedly right in saying that his "prose imagery possesses both truth and splendor," and yet we can not read his prose with much interest. This little book is published in very neat form, by Ginn & Co., Boston.

Prof. C. T. Winchester, of Wesleyan University, has prepared FIVE SHORT COURSES OF READING IN ENGLISH LITERATURE, originally intended for college students. In their present form they will doubtless prove of real service to teachers, librarians and others. These courses cover a period from Marlow, and Shakespeare to Tennyson and Browning. Published by Ginn & Co., Boston.

THE NEW WORLD AND THE NEW BOOK is the title of a book by that acute critic and charming writer, Col. T. W. Higginson. Here are twenty-two scholarly, incisive, thoughtful essays. We greatly admire his strong, breezy, broad and genuinely American spirit. He punctures the foibles of his countrymen only that they may stand more erect, independent and outspoken, and say what God gives them to say fearlessly as did Thoreau or Emerson. The first paper was given as an address before the "Nineteenth Century Club," January 15, 1891. It is full of warm discriminating praise of Irving, Motley, Jefferson, John Brown, Lincoln, Emerson and Howells. In "Town and Gown," he speaks words of truth to college men, often held in too high estimation by men of affairs. In the essay "On Literary Tonics," he shows how the civil war, the Indian question, woman suffrage and other great movements, have moulded our great writers. It is needless to say that this is a readable book from cover to cover. It is also a fine literary tonic. We wish its spirit might breathe in all the young men of our land. The publishers are Lee & Shepard, of Boston.

AFRICA AND AMERICA is the title of an excellent volume of addresses and discourses by Alex. Crummell, rector of St. Luke's church, Washington. As the author is himself a negro his words come to us with special weight. He looks upon the millions of his race, most of them still in the bonds of dense ignorance, poverty and moral and spiritual degradation, with a great longing to benefit them and lift them up. In these sixteen discussions of such subjects as "The need of New Ideas and New Motives for a New Era," "The Race Problem in America," "The Black Woman of the South," "Our National Mistakes," "Rightmindedness," "The Dignity of Labor," "The Regeneration of Africa," "Common Sense in Common Schooling," eulogies on Thomas Clarkson and Dr. Garnett, and "The Responsibility of the First Fathers of a Country for their Future Life and Destiny," he goes to the root of some of the most important problems which concern the race of which he is a conspicuous member. He is a vigorous reasoner, an eloquent orator and thoroughly alive — by residence, observation and study — to the circumstances, needs and possibilities of his race both in this country and in Africa. This volume is packed with good advice and fertile in suggestions for their betterment. All of these may not prove wise or best, but some certainly are. This book should be studied by every friend of the negro. Published by Willey & Co., Springfield, Mass.

Mr. George E. Gay has made a little book entitled A DRILL BOOK IN ENGLISH, which in a nut shell contains the best that is in the grammars, and just what any school boy and girl should be fully cognizant of. Mr. Gay believes in contrasting bad forms with correct forms, and his book contains pages of incorrect matter which the student is required to set right. An admirable feature is the exercises on proof reading. Mr. Gay has made a distinct contribution to the study of English, and his little book should be found in use in all grammar and high schools. Allyn & Bacon, Boston, Publishers.

Miss Augusta C. Kimball, of the Girls' High School, Boston, has edited George Sands' LA FAMILLE DE GERMANDRE. To the text is prefixed an admirable life of the famous author. The notes are surprisingly few, being compassed within two pages. This edition will be a valuable addition to the list of supplementary reading for students in French. Ginn & Co., Boston.

There is no more dreaded disease than consumption, and the best endeavors of the medical faculty have been put to discovering a cure for it. Koch's lymph promised wonderful things, but it has failed to make good the claims of its advocates. Until a cure has been discovered, the best that those afflicted with consumption, either by inheritance or acquisition can do is to live hygienically, and in such localities as offer the best conditions for resistance of the progress of the insidious disease. Dr. N. S. Davis, Jr., has written a book entitled CONSUMPTION, in which he tells in plain language how to prevent and how to live with consumption. He also gives a succinct account of its cause, its nature, and its prevention, and prescribes the mode of life, climate, exercise, food, and clothing necessary for its cure. Dr. Davis has no pet theory to advance, no sure cure for the disease, no pharmaceutical preparations to offer. He believes in a common sense handling of the case, and his advice and suggestions are such as the poorest as well as the richest may follow and adopt. His book is one of the best popular treatises on consumption that we know of. Published by F. A. Davis, Philadelphia.

MANUAL OF PLANE GEOMETRY, on the Heuristic plan, with numerous extra exercises, both theorems and problems, for advance work, is the full title of a new work by G. Irving Hopkins, instructor in mathematics in high school, Manchester, N. H. By this plan the pupil originates the demonstration rather than memorizes the demonstrations of another. Pupils construct their own diagrams, state the converse of the theorems they are to prove, and compute problems which make practical application of the theorems demonstrated. The old division into books has been discarded, and the theorems proceed as in one book. The word *heuristic*, means method of discovery, and is similar in meaning to inventorial. By the heuristic method the pupil is led to see the theorems and their demonstrations for himself. Professor Hopkins has worked out the method in a most admirable and scholarly manner, and his manual has stood the test of three years' work in his own class-room before being given to the public. The method and the book are destined to work a revolution in the study of geometry. Every teacher of geometry should examine the work. Published by D. C. Heath & Co.

The recent demand for works on Ethics for use in public schools, has called forth an avalanche of treatises ranging from the most abstruse to the veriest drivel. The happy medium has been struck but few times. It is no easy matter for an ethicist to steer clear of the abstractions and hypotheses and theories of his subject, and make a work which can be used by students in the lower grade schools. In ELEMENTS OF ETHICAL SCIENCE, Hon. John Ogden, appears to have accomplished that which he set out to do, make a treatise on Ethics which can be used in schools, colleges, teachers' institutes, and reading circles. At the start, Mr. Ogden lays down certain propositions which require consideration and demonstration. When the students have made the demonstration, the principles which underlie the science have been brought to light, and their application follows naturally. Mr. Ogden writes clearly, and somewhat tersely; his language is never turgid. He illustrates the principles of the science as they are unfolded, and his illustrations and applications are at once to the point and cogent. Published by John Ogden, State Superintendent Public Instruction, Bismarck, N. D.

ENGLISH WORDS. An Elementary Study of Derivations. This is the title of Prof. Charles F. Johnson's modest volume on words, their derivations, values, character, etc. The author has made no claims to go into the subject deeply, although his knowledge of philology is most extensive, but he has desired to give in a popular and attractive form the meaning of words, their sources and their uses. After a few chapters on the importance of language and linguistic relationship, the author takes up words derived from the Low-Germanic, Celtic, Latin and other languages, and gives their origin and history. He tells the story of our language with rare exactness and in a most charming style. Every page is interesting reading, and replete with facts and information. Professor Johnson traces to their sources words having peculiar meanings, eschewing all fanciful derivations and combinations. It is a scholarly, important and intensely interesting treatise on words, and will be found to possess great value to all students and teachers. Published by Harper & Brothers, New York.

Those who are not satisfied with the International Sunday-school lessons, and many are not, will do well to examine OUTLINE INDUCTIVE BIBLE STUDIES, by Rev. Erastus Blakeslee of Spencer, Mass. These studies deal with the life of Christ and the Apostolic church. The method is inductive; a study first of facts and then of principles. The whole of the scripture material is studied rather than brief extracts. These lessons are meeting with great favor because they arouse increased interest in the study of the Bible itself. They are fresh, warm, practical and abreast of the times. Address the Bible Study Publishing Co., 13½ Bromfield street, Boston.

Dr. Johnson's RASSELAS has long held a high place in the popular regard. It is a compact storehouse of wisdom, all the more enjoyable for being presented in a quaint or ponderous form. What a great company of youth have received instruction and beheld themselves as in a glass, as they listened to the history of Rasselas the Prince of Abyssinia. A new and handy edition of this little book has just been edited by Prof. Fred N. Scott, Ph. D., of Michigan University. The introduction on methods of study is excellent, and the notes very serviceable. The publishers are Leach, Shewell & Sanborn, of Boston. Price 42 cents.

LATIN PROSE EXERCISES, based upon Livy, Book XXI., is the title of a little book edited by A. Judson Eaton, Ph. D., of McGill University. Livy has never before been used as the basis for prose composition, and these exercises as a preliminary to a study of the text of Livy, will prove to be very valuable. The arrangement of the selections is a happy one. In the appendix are found excellent notes, suggestions to students and a study of the periodic style of Livy. Published by Ginn & Co.

The initial number of SCHOOL AND COLLEGE is at hand. It is tastefully gotten up and its several departments are full of interesting matter. Restricted to Secondary and Higher Education its articles are such as will find favor with those engaged in high school and college teaching. A cordial welcome is extended to the new comer. There is room for just such a magazine, and if the editor, Ray Greene Huling, shows as much aptitude in the sanctum as in the school-room, his success is assured from the start. Ginn & Co., Boston, are the publishers.

THE FOURFOLD STORY, A Study of the Gospels, by George F. Genung, Congregational S. S. and Publishing Society, is the story of Christ's life, told by Matthew, Mark, Luke and John. Mr. Genung shows how each writer looks at Jesus from his own standpoint. Matthew sees in Him the King, the Lawgiver and Redeemer in whom prophecy is fulfilled. Mark views Him as the Mighty Worker, proving by miracles that He is the Son of God. Luke portrays Him as the Divine Friend, supplying all spiritual wants. John tells us of the "Word made flesh" and of God's great love in giving us His Son and bids us "believe." The author shows in the happiest manner how these different accounts support and supplement each other, making together a complete whole.

Sir Walter Scott's MARMION in the Students' Series of English Classics, edited by Mary Harriott Norris, is a neat volume, well arranged for its purpose, which is educational. A biographical sketch of Sir Walter Scott prefaces the poem, giving a pleasant picture of his early life and literary development up to the time when "Marmion" was published. The leading events of the remainder of his life are given in a clear and compact manner that will aid in fixing them in the memory. The author's own notes are supplemented by very full and careful annotations of the editor, thus rendering books of reference almost unnecessary to the student. Leach, Shewell & Sanborn, Boston.

GLIMPSES AT THE PLANT WORLD, by Fanny D. Bergen, illustrated, is a well-named book and will open a new world to the children who read it, — a world whose beauty and vastness are suggested so winningly that their noblest curiosity will be stirred, and they will be led on to explore its wonders. The author knows and loves children as well as flowers. Plants are talked of by their familiar names, as old friends. The stories and fancies about them which children love are deftly interwoven with descriptions of their nature and uses. Seed-fertilizing and seed-sowing are simply and clearly explained by the aid of the illustrations, and are characterized by the same graceful, poetical treatment which makes the whole book very attractive. Lee & Shepard.

Harold N. Fowler has revised Allen and Greenough's SELECTIONS FROM OVID, and a special vocabulary has been added, prepared by James B. Greenough. The selections are principally from the metamorphoses, although Ovid's shorter poems are added, enough to make over two hundred pages of Latin text. The notes are comprehensive and are illustrated with numerous cuts. The specially prepared vocabulary is a valuable feature of the edition, which, taken altogether, is one of the best among the many excellent annotated editions of Ovid's poems.

The GATE TO CÆSAR, is the apt title which Mr. Wm. C. Collar, Headmaster, Roxbury Latin School, has chosen for his little work on the Second book of Gallic War. Mr. Collar believes that Gallic War is as hard as any prose Latin that has come down to us, and that it is cruel to put beginners in Latin to translating this obscure and most bewildering Latin. To make the path easier he has taken the Second Book of the War and simplified the text, excising about one-fifth of Cæsar's text. The narrative is kept intact and but few new words are inserted. It is not made Latin, it is Cæsar's Latin disburdened of its greatest difficulties. The complete text follows the simplified text. Notes are

given on both texts and exercises in Latin prose composition, based on the simplified text. A Latin-English vocabulary is given, and this is supplemented with an etymological vocabulary. The book is one that all teachers of Latin will welcome, and students will bless the author for thus blazing the way for them. It should find immediate acceptance and use in all preparatory schools. Ginn & Co.

Probably the most valuable addition to Heath's series of German Texts is Goethe's HERMANN AND DOROTHEA, edited by W. T. Hewett, Professor of German in Cornell University. Professor Hewett has prefaced the poem with a full explanation of the times concerning which Goethe wrote, and has given a complete account of the writing of the poem and its reception by the Germans. The notes are copious and learned, and a bibliography of the poem is appended. This masterpiece of Goethe has never had a more scholarly setting than that given it by Professor Hewett.

WELLS OF ENGLISH is the admirable title of Isaac Bassett Choate's new book. This title to a painstaking study of some forty of the worthy but less known contributors to our early English tongue is taken from Spencer's well-known line, "Dan Chaucer, well of English undefyled." Seven or eight pages are devoted to each of these worthies. Their time, their characteristics and their influence are considered, and choice extracts given from their writings. Beginning with Thomas of Erceldoune, the Chaucer of Scotland, though flourishing a century before him (1240-1298), the list includes such names as John Barbour, William Langland,—contemporary of Chaucer and author of that interesting poem, "Vision Concerning Piers the Plowman"—John Ball, John Skelton, William Dunbar, Thomas Tusser, Henry Howard, George Chapman, Samuel Daniel, Michael Drayton, Cyril Tourneur, and others down to Andrew Marvell and John Evelyn. As we scan these pages we are surprised at the riches of our early English literature and feel that here is indeed "the supply and the outflow of a deep national life." This is a valuable and enjoyable book. Published by Roberts Brothers, Boston.

We give most cordial welcome to a second series of POEMS by Emily Dickinson. These winnowed gems have been lovingly and carefully edited by two of her friends, Col. T. W. Higginson and Mabel Loomis Todd. What marvelous skill and delicate poetic insight she possessed. A subtle instinct led her to take unerring aim at the very soul and essence of things fragil and evanescent. Old themes are dressed in a new garb in her quaint speech. She never wastes words; she is a miser in their use. A close, accurate reader of nature's secrets, she finds new meanings in flowers and birds and winds and sky. She paints on a small canvas, but the painting is perfect. Death she meets with a sweet smile as an old friend. So close was her hold on immortality and so clear her vision of things hid to most eyes, that she cared little for human society and the pleasures which make up life to most. In these 210 pages are many brief but exquisite poems,—poems which fall like flashes of sunlight in dark and unexpected places. What a gem is "The Humming Bird," or "The Wind's Visit." How characteristic is the first line of this volume, "I'm nobody! Who are you?" She interprets life and nature. No wonder a great company read her poems and ask for more. Published by Roberts Brothers, Boston.

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

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CARDINAL PROBLEMS OF PHILOSOPHY AT THE PRESENT.

PROF. B. C. BURT, ANN ARBOR, MICHIGAN.

THE problem of philosophy is, in general, to state the meaning of existence in terms of thought, — to propound the thought-view of the universe. The thought-view of the universe is a view of it in which thought is not merely the form into which a matter given in experience is thrown for clear, objective intelligence's sake, but also, and chiefly perhaps, the very content of the view of the world. The world as apprehended by mere sense, or sensibility, is, as it were, formless, an unordered congeries of individual existences, a chaos. Taken into the interior of the mind, which is essentially an active, organizing principle, it develops, or is developed into, an ordered whole. As such it is apprehended in understanding. But understanding, not divining that this whole may be in some sense a product of the mind's activity, views it as something distinct from itself. It separates its own work and that of sense, maintains the absolute duality of being — a duality of matter, given by sense and form, supplied by the understanding. Of real matter, according to it, we know only as mere sensation reports; it is, in fact, merely sensation with an additional reference to something underlying it, or rather, perhaps, this underlying something, — the "thing-in-itself." Of form we have definite apprehension through reflection upon the modes of conception, judgment and inference by which alone order is introduced into the matter given by sense. Form resolves itself into

a body of categories, or thought-determinations, such as quality, quantity, measure, identity, difference, ground, substance, cause and effect, reciprocity, means, end, etc. By use of these, in the activity of thought it is that the chaotic world of sense becomes for us an ordered whole. Every proposition expressing anything beyond the purely sensible qualities of existence involves some one or more of these thought-determinations. But now, if this be true, there is contained even in the world as it presents itself to the understanding an intimation of a unity transcending, or rather, immanent in, the duality of mind and things in themselves. If we deduct from the world as immediately known to understanding all that form contributes towards it, we find, it may be, a certain residuum of sense; but it is one of which we should have no consciousness but for the forms of thought (including the forms, *pure* sensible intuition, i. e., *pure* space and *pure* time). A sensation having no quality, no quantity, no relation to space or time is nothing for us, though it may, when it possesses these, be something more than the mere abstract notions of quality, quantity, space and time. And, on the other hand, it is certain that ordinary thought, at least, derives its meaning — because its matter — from sensation, that, as regards it, just as sensation without thought is "blind," to use the language of Kant, so thought without sensation is "empty." There is, in short, a natural affinity, so to say, between thought-forms and sensation, between the "faculties" of thought and of sense, and between the respective objects of these faculties, which marks them as organically related parts of the same whole. The absolute duality which the (imperfect) understanding finds in the world is a baseless fabrication, intolerable to reason. We are compelled by the impulse of free untrammeled spirit to conceive the world as a product and manifestation of a power which is essentially thought-determined, i. e., a spiritual, thinking power. And to do so is not mere blind dogmatism since dogmatism asserts the unity of thought and being without investigation into the nature of knowledge as an organic process. It is, rather, true speculative insight, insight which successfully passes the ordeal of criticism or enlightened scepticism. Now the thought of the world as a product of thought is, obviously, the thought of thought; and constitutes philosophy most properly so-called. And the thought of thought is threefold: it is (1) the thought of thought purely

as such, i. e., the doctrine of categories; (2) thought of thought as externalized, i. e., in nature; (3) thought of thought as inwardly realized, in spiritual life. The problem of philosophy has, then, three main branches. In what follows we shall consider each of these with particular reference to the present age.

As regards the first of these branches — there was a time when what are now known as the categories were denied any real meaning. Locke affirmed that we knew and could know no such thing as substance, that the term substance was merely a sign of ignorance; and Hume attempted to reduce the notion of cause and effect to mere habit of mental association. Kant put an end to this period of scepticism regarding the categories by showing that they form a necessary factor in all experience whatever (hence were prior to all mental habits of association), are necessarily contained in the world as known or knowable by us. In so doing, Kant laid the foundations of the (modern) thought of pure thought as one of the recognized human sciences. Kant failed to attain completely to the thought of thought in that he did not perceive fully the organic connection of the categories, the logical origin of one from another, but merely pointed them out empirically and showed their immanence in experience real and possible. The completion of the structure so masterfully begun by Kant was left for Fichte and Hegel, who undertook to trace the categories to, or rather from, the absolute nature of thought as such. But Fichte, as well as Kant, though not to the same extent, assumed a merely subjective value for the categories, inasmuch as he treated the objective world as in itself unknowable and as being for thought merely a foil or stimulus. Hegel showed that the categories, by their own momentum as it were, pass out of themselves into externality, or that the concrete objective (not merely the *fact* of objectivity) is a natural and necessary counterpart of the subjective and because thought is in all aspects organic, every part containing the whole which as whole must have its parts: Hegel, in other words, showed that we really think and know objective being in any and every sense of the term. Now it would be very easy to show that the conditions of the intellectual world at the present time are such that the affirmation of this Kantio-Fichtean-Hegelian doctrine of pure thought is of the utmost practical importance, philosophically speaking; and especially the affirmation of it in the form of a reasoned denial

of the mere experiential, "evolutional," doctrine of the origin and meaning of the categories. The affirmation of this doctrine is the best possible — the only — refutation of the class of thinkers, who, while feeling to a certain extent the force of the Kantian refutation of the sensationalism of Locke and Hume, yet reassert the sensational theory in a new form, in that, though admitting the categories to be somewhat other than mere sensations, they allow to them a purely experiential source, an origin from the "experience of the race." There is no conceivable experience from which solely in its sensational aspect the categories absolutely originated, none in which the categories were not already contained as an essential factor. In the experience of the race as a collective body of mere individuals or mere feeling subjects, there has been, we may admit, a certain "evolution" of the categories; but this can mean only that the categories have themselves evolved or developed, i. e., manifested themselves, or come into merely subjective consciousness. There appears to be no way of ultimately conceiving experience except as a self-thinking, self-manifesting thought, as a thought of a thought eternally active. As regards thought considered as method — thus far we have treated of it as content, rather — it is certainly of immense moment, practically, in view of the great prevalence of the notion that all thinking is merely the concomitant of a matter or stimulus presented from without, to assert and demonstrate emphatically the originality of thought and the necessary objectivity of it at least to a much greater degree than it is the fashion at present to allow — as a method. There is constant danger, in this period of great wealth of empirical knowledge, that human thinking may be tempted to deny or stultify itself, unless reminded by those whose occupation it is to care for thought for its own sake of its inherent power and dignity. Philosophy cannot more effectually accomplish its practical work at the present time than by explaining the nature of, and fostering in men's minds the disposition to surrender themselves as individuals to that self-determining systematic activity which pure thought must be, an activity it should be noted, quite distinct from the brisk or the dogged exercise of the mere subjective empty will as well as from the passive reception of and dependence upon a matter coming from without the individual mind. As regards the method of thought, philosophy has to show and insist above all that it cannot in the last analysis

be separated from the matter of thought, though the separation of method and matter is a most notable characteristic and point of limitation in branches of knowledge not philosophical and hence merely relative.

The thought of thought externalized — to pass now to the second main branch of the problem of philosophy — is, of course, the philosophy of nature. At no time more than at present has there been a greater need for a true philosophy of nature; and at no time has the need for a philosophy of nature been greater as compared with that of other branches of philosophy. The multiplicity of general facts, collected by the sciences, which require to be coördinated, has never been so great; the danger of missing the inner meaning of existence through the multiplicity of its mere phenomena has never been so great as at present. To apprehend more precisely what the present problem of philosophy as regards nature is, let us consider, first, how it is that nature must be thought at all, what it is as "thought externalized." The true theory of knowledge in general teaches as a cardinal truth, that thought and being are one, or that real being is conceivable only under some form of consciousness, or in relation to consciousness. For logical purposes, nature, though in one sense rightly described as unconscious, is yet a form of consciousness. It is not mere formlessness, mere indefinite matter. Every particle of "matter," real or possible, is conceivable only as pregnant with quality, or law, i. e., form, for what is it in any case that we think if not something of this sort? Even as *un*conscious, nature is a form of consciousness since "unconscious" is a meaningless term apart from "conscious" which logically precedes it. If nature is unconscious in any sense, it is so because consciousness has made it so for its own ends. Nature, then, is a form of thought. It is "thought externalized," because in it there are no complete wholes; in it the parts of wholes as they exist for thoughts are separated in space and time, single individuals of a class are but imperfect embodiments of the notion, an ideal totality of the class which involves a multitude of individuals; in nature wholes never *are*, but always are to *be*. Nature is a perpetual struggle towards the inward ideality, the complete organic unity of thought. Nature merely *foreshadows* the truth as it is in itself. It does this in different degrees, in the various orders of natural existence. In the universally acknowledged highest forms of

natural existence — in man and the animal forms next in rank below him — the inwardness and organic totality of ideal truth are most clearly foreshadowed — but not yet fully realized. In mere space, time, motion, gravity, chemical action, etc., we have lower realizations, or manifestations, of the truth of thought. Now when natural science teaches, as it to-day too often does, virtually the doctrine that nature is an independent, self-contained existence, undetermined by thought, it is especially required of teachers of philosophy to expound and affirm the synthetic truth that nature, rightly understood, is but a dependent existence, a partial realization of truth as it is in itself and as apprehensible by a degree of insight possible to human faculties. And when natural science in its attempt to group a vast mass of new fact into convenient unities is under great liability — in fact the necessity — of being satisfied with unities which are rather abstract and formal — such, for example, as "force," "persistence of force," "homogeneity," "evolution" — it is supremely important to declare and maintain the philosophical truth that the unity of nature is a dialectical one, a unity of contrarieties, a unity of parts of an ideal eternal ideal series, not of mere finite coexistence and sequence, or an abstract inconceivable somewhat (like, for example, Spencer's "unknowable," or Von Hartmann's "Unconscious") lying behind these. For example, if natural science insists, as it rightly does, on treating the various "forces" so-called, as manifestations of a single force, philosophy must also insist that, as there is no identity without difference, the forces, to be completely understood, must be seen in a relation which exhibits their respective positions in the mechanico-physico-organic order of nature; or if natural science teaches that the bodies of the solar system are held in their orbits by the attraction of the sun, philosophy must point out that the sun's attraction must be viewed as also a form of the action of the individual heavenly bodies themselves, and that, consequently, the motion of the heavenly bodies about the sun is not merely a mechanical one, i. e., a motion determined from outside, but a (partially) free one, — or, again, if natural science at the present day is prone to assert that life is merely a consequence of the confluence of physical atoms, philosophy must especially emphasize the thought that the phenomena of life can be truly comprehended only under the notion of a self-determining whole which is in a sense prior to and mas-

ter of its parts, instead of being the mere resultant of them. In general, it is required of philosophy at the present moment to set forth and emphasize the notion of nature as a concrete, not merely formal, system of things and, of course, to demonstrate this notion by properly reading it into the acknowledged facts of nature. In view of the very common prejudice that the truths of natural science are ultimate truths of human knowledge, that there is no truth beyond the actual or possible ken of natural science merely as such, philosophy is called upon to emphasize the fact that every highest truth or generalization of natural science properly so-called, has by the philosopher to be restated on terms of, or to be brought under still higher truth, namely, truth of pure as distinguished from merely representational thought, that, in other words, the principles and the method of natural science are in a certain degree merely abstract, formal and provisional; — all of which means that nature presupposes for its full comprehension something beyond and above itself.

Thought as inwardly realized, or realized in a manner adequate to its ideality or intensiveness of nature, is spirit. The thought of thought in this sense, which is the philosophy of spirit, is the thought of thought in the highest sense of the term. The thought of thought purely as such, thought in its merely logical character, has the defect that it lacks reality, and in so far as it points beyond itself to objectivity, also lacks freedom or self-sufficiency. Thought as realized in nature has the defect that it is predominantly real, is lacking in ideality, and also in freedom, for in nature as externality everything is outside everything else and dependent upon it. In spirit the real and the ideal, the necessary and the free are united. Spirit is thought realized in such fashion that each part is the whole, the individual faithfully reflects the genus, the externality of space and time is overcome, spirit being centre as well as circumference, past and future as well as present, etc., etc. Such now, is the pivotal idea of the thought of thought as spirit, and at no time more than at the present, has it been of paramount importance to declare and expound this idea in its many shapes. The true aim of human life and culture is doubtless rational self-determination, the maintenance, as it were, of an erect, independent attitude of soul in the midst of the influences of environment. This can be done only if the soul, which in its undeveloped condition is immersed in nature, distinguish

itself at once theoretically and practically from mere nature. This it can do only as the notion of its own essence is theoretically and practically active in it. This notion it is the business of philosophy, as we have seen, to set forth. If spirit be essentially self-determining, it can be determined by its environment, nature, only as the other of itself, or itself in another form; and hence the idea prevalent in ordinary, and even in scientific reflection at the present time, that spirit is a mere function of matter, soul of body, is a half-truth, a thing for philosophy to combat and transform. And philosophy will not so much teach that it is necessary for the ends of human development to abstract as much as possible from the body and bodily conditions, as that body and bodily conditions are the souls' appropriate instruments of *self*-development, that the varied and subtle control of bodily functions by mind which the cultured human being possesses is the manifestation of the real destiny of the body. In the psychological, as distinguished from the logical doctrine of knowledge, philosophy has at the present time to combat the notions of subject and of object as two mechanically related entities interacting in such a way as to produce a result — cognition — which is totally different from either, and hence, not a real manifestation of either; and to assert, on the contrary, the true conceptions of them as organically related parts of the same (conscious) whole, subject and object being identified in and by the same process in and by which they are distinguished, subject being ideally what object is really. By so doing philosophy will correct the thoughtless agnosticism to which the present age, in spite of its enlightenment, or even, unfortunately, because of it, seems particularly liable. For if subject and object have a common root and substance, then knowledge, or the activity of subject, is the conscious existence of what as unconscious is object — there is no absolutely unknowable thing — in itself. The mind has in its sober depths, and apart from external stimuli of any sort, certain foretastes of a reality which it has not "experienced." In relation to the human will, philosophy has at present a specially important task to perform. And from what has been said in the foregoing it is easy to gather what that task is, — namely, to emphasize the doctrine of its essential ideality and freedom. The mark of spirit as distinguished from nature is just its ideality and freedom in the sense of its being the higher truth of nature, transcending it, employ-

ing it for ends lying beyond and above it. Spirit is free because self-referent and so self-determining, whatever its environment, or, in other words, because it is its own environment. As in this sense free spirit realizes its ideal destiny neither in the mere gratification of natural inclination and the securing of material advantage, nor in the ascetic abstraction from such things. There is ideally neither pure sense nor pure intellectual intuition, but rather the energy of systematic thought. Hence it is that philosophy is called upon to oppose — and to oppose vigorously — the ethical theories, known, on the one hand, as hedonism and utilitarianism, and, on the other, as intuitionalism, which are very prevalent in the present age, — and to maintain in their stead the new-old doctrine of complete rational self-determination as the work and business of humanity. Not less important than the ethical is the theologico-religious task imposed upon philosophy by existing conditions of thought and life. Unquestionably theological and religious thinking at the present is being guided less and less by the category of transcendence and more and more by that of immanence in its notion of the deity. This tendency towards the category of immanence is so strong and widespread that, whereas the notion of the necessity of a mediator between God and man was once undisputed in sway, it is now largely replaced by that of a direct "God-consciousness" in each human individual. Now the task of philosophy in relation to this matter is to deduce and assign the real logical meanings, absolute and relative, of the terms "immanence" and "transcendence" — for these are not empirical, but speculative terms — and to point out, in a general way, what emotional and imaginational representations of deity, — for religion is a product of emotion and imagination, — best correspond with those meanings at the present time. Now if philosophical truth is, as we have seen, the unity of opposites, "immanence" and "transcendence" are terms having meaning only in relation to one another; a transcendent deity is also immanent, and vice versa, and this the more so the more he is made an object of thought as distinguished from mere fancy, since thought is just the realized synthesis of ideally related terms. This being the case, philosophy undoubtedly sanctions the tendency, abovementioned, towards the category of immanence, but, of course, has a caution to utter against the conceiving of the immanence of the deity as mere presence in feeling or subjective reflection

or the like — a sort of immanence not in reality to be distinguished from mere transcendence. And in connection with the teaching of the truth just now stated, philosophy unquestionably must emphasize the beauty of the virtue of candor, for the help of those who, while virtually admitting this truth, hesitate to discard the phraseology of a form of religion which only half declares the truth.

Finally, philosophy has no more important task to perform at the present time than to declare its own nature, and to demonstrate its right to be — for philosophy does not ask to be taken for granted. It must distinguish from itself all degrees of consciousness — "common sense," natural science, including empirical psychology, morals and politics, pedagogy, art, religion. Philosophy, we have seen, is the "*thought*-view of the universe"; and it is "thought" as regards both matter and method, content and form; all other degrees of consciousness are something less, or other than thought either in form or in content. Natural science, for example, — which it is particularly important at the present time to distinguish from philosophy, — is sense-perception as regards content and thought, and that, too, in a secondary degree, as regards method only. Religion, which also it is especially necessary not to confound with philosophy, is thought as regards meaning or content, but imagination and feeling in method or form. The right of philosophy to be, and to claim a share of men's living attention lies in its being the precise utterance, and the sole precise utterance, of pure self-consciousness, or of human nature in its very essence. Without a certain consciousness of self, and so of the absolute identity of existence in general, no other consciousness is conceivable; without an enlightened self-consciousness no real perfection of consciousness of any other sort. Without philosophy there is no complete truth; it is the end, as it is, virtually, the beginning, of all knowledge and life.

SCHOOL DISCIPLINE.

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II.

METHODS AND MEANS.

THE law of the creation of power, namely, that power is created by the use of power, requires that the work of training should be done by the pupil and not by the teacher. The question is not how you can govern a class of children, but rather how you can develop in them the power and inclination to govern themselves. The method of discipline is one of indirection. The teacher is to create power of self-restraint and self-direction in pupils by inducing them to exercise what power of self-restraint and self-direction they already possess. Stir pupils to right action, put into their minds the right motives for right action, and then subtract your own personal influence as far as possible. How many teachers are to-day worrying themselves into conditions of nervous prostration by trying to do for their pupils what the pupils should be doing for themselves. First, learn to govern your pupils perfectly, then learn how to get along without governing them at all.

The law that habits are formed by the repetition of similar processes requires that the pupil act constantly as he ought to act, and that his efforts at right conduct be continued till it costs him no effort to act right. Suppose your most wayward pupil should, by some wonderful means, be induced to obey you promptly for a thousand times; what would be the probability that he would obey you promptly when you spoke the next time? Correct acts of speech, deportment, thought, feeling, and volition may be performed times without number, and, yet, if they are interspersed with frequent opposite acts, no correct habits will be formed. The disciplinary effect of an occasional act of obedience is very slight. You may make a great display of power at times, and thus compel every pupil to continuous stillness and application, but if quiet order and continuous work are not secured with regu-

larity, little or no progress is made by the pupil in establishing the habit of orderly conduct and continuous effort. Vacillation in the conduct of pupils, resulting from vacillation in the requirement of the teacher, is the great obstacle to the establishing of correct habits of action. What you require once, always require. What you insist upon once, insist upon at all times. Let the pupil feel constantly the sense of personal responsibility. Let him know that personal conduct is a personal matter for which he is personally responsible.

The whole doctrine of methods of school discipline may be summed up briefly thus: Be uniform in your requirements; teach your pupils to govern themselves; and see that they mature into fixed habits all those actions which they should habitually perform.

How can this be done? By what means can school discipline be enforced? I confess, at the outset, that it is much easier to lay down the law, than to indicate efficient means for its enforcement. The reason for this lies in the fact that efficient forces of discipline consist largely of the personality, the knowledge, and the habits of the teacher himself. If you do not possess the qualities needed by a good disciplinarian, you cannot discipline well till you develop them in yourself. Keenness and rapidity of observation, firmness of purpose, uniformity of aim, kindness of heart, cheerfulness of disposition, agreeable manners, a pleasant voice, — if you lack these characteristics, you need not expect to discipline a school well till you acquire them. In such a case, your disciplinary efforts should be subjective; they should be directed to the creation of the very elements of disciplinary power. Young teachers often ask for specific rules that may be applied in special cases. Such rules are useless, because so much depends upon the teacher. A teacher once asked me this question: "What would you do in case of whispering, or disobedience?" My reply was, "I would stop it." The further question came, "How would you stop it?" My answer was, "With the force of my moral character." This was not an answer to the real question in the teacher's mind; but it was about as near to it as I could go. And yet it may be of use to state some of the more important agencies which, in the case of teachers who are capable of applying them, are useful in securing order in school, and in securing it in such a way as to produce

those elements of character which should be taken from the school to active life.

1. The first that I will mention is activity, or employment. Leave no time for mischief. Provide for work deliberately and in advance of the time when the work is to be done. If you depend upon inventing a program for each day and hour, monotony or confusion is likely to result. Your own idiosyncracies will manifest themselves too often; and they may not be agreeable. You are likely to give too much time to what you like best; but your pupils may not be prepared for your special method of work. Provide in your program for each full hour's work. Do not trust too much to inspiration for providing for the last part of the hour; you might not be inspired at the right moment. When the time for physical exercise comes let the exercise be vigorous. Let it be as much of a luxury to sit down at the close of the exercises as it was to stand up at the beginning. Monotonous lifeless motions are not only useless in themselves, but they do not prepare the pupils for the quiet of the study hour. Make the exercises so lively that the blood will dance and tingle in the veins, and that the muscles will need rest; and then rest will be sought, and quiet will come unsought.

2. Teach your pupils to work. Herbert Spencer predicts the time, in the development of the race, when there will be a close competition for the privilege of doing the work that will need to be done in the world; and a later stage, when there will be competition in the self-sacrifice of allowing others to do the needed work. But we have not yet reached the first of these stages. We are still willing to concede to others the privilege of doing all the work they wish, and we are not over anxious for the drudgery of work ourselves. As the world is at present constituted there is more work to be done than is agreeable. There is still a vital difference between work and play, and children may as well face the disagreeable truth early in their lives and be taught to act accordingly.

Teach work by your own example. Do not pretend that hard work is always agreeable; yet work, and work earnestly, because there is work to be done. Lay upon your pupils the duty of work. Banish the idea that the world owes any man a living till he has earned it, — or any woman. Teach the children that what one gets that he does not earn, another earns that he does not get.

Teach them that idleness is sin, and that indolence is robbery. Show them that every human being is dependent upon others for all the means of physical and mental pleasure which he enjoys, and that no one is exempt from the duty of creating equal means of enjoyment for others, and that this involves work. Impel children to work by your example, by your precepts, and by a sense of duty. Have a time for play; but also have a time for work, and insist that neither trenches upon the rights of the other.

There is no greater fallacy of the age than this: that no child should work up to the fatigue point. Work that causes no fatigue is usually defective. It is either too short, or lacking in vigor. Teach children the manliness of vigorous, energetic, efficient work. Teach them how to work, — how to study, how to read, — but teach them that work is that without which school life and all other life is a fraud upon the world.

Of course the work of the school is to be directed by the teacher. The pupil is to work while the teacher teaches. But he is to work when there is no teaching. There is, or ought to be, in every school, such an exercise as study. I am inclined to think that most of us teach too much and require too little independent study by the pupils. I have finally settled down to the practice, in my own school, of requiring as much study as teaching. Every hour's teaching is to be followed, or preceded, by an hour's study by the pupils. I think it would be well in all grades of schools to have a portion of time set apart for study, and then to have it regarded as a misdemeanor for the teacher to speak or stand during that time. No teacher can teach continuously, and no child can study well if constantly interrupted. During the study hour let dead silence reign. Work is one of the most efficient means for securing order and developing character in school.

3. Make the school attractive. The schoolroom should be pleasant, — neither too hot nor too cold, neither too light nor too dark. Have the seats and desks just high enough for comfort; if two sizes of seats will not secure this, use three or four. Adorn the walls with a few pictures. Keep a few green plants, not for analysis, but for beauty. See that the blackboard is neat. Write beautifully and draw the same. Be attractive yourself. Dress well. Dress need not be expensive, but should be in good taste. It is wonderful that a bit of bright color should give so much

pleasure to a class of children. Grudge not the expense of a new ribbon as a means of discipline. Cultivate in yourself the graces of manners and speech. Put off your official manners and act like a human being among other human beings. Speak in human tones. Laugh at anything ridiculous that occurs; and see that something ridiculous does occur, and that it occurs often enough to sweeten school life. Do not look cross. Be cheerful, be animated. Look, act, and speak as though you thought it a good thing to live in this world. Keep yourself in sympathy with your pupils. Be helpful to them. Cheer and encourage the dull and despondent. Make yourself felt as the light, life, and joy of the room. Make your teaching so clear that it will carry intellectual light into every mind. There is nothing that renders intellectual life so attractive as the clear perception of the truth. Teach before you examine; and never blame your pupils for the bad effects of poor teaching. In all reasonable ways make the school a delightful place.

4. Use your authority. Nobody believes in a pleasant, cheerful schoolroom more than I; but as human nature is at present constituted, most children, at times, need something more than the influence of cheerfulness, sympathy, and love to keep them up to the standard of action necessary to develop them into the most efficient manhood. They need to feel the necessity of obedience and industry. When they leave school, there will be work to be done and laws to be obeyed, and there will be no teacher to follow them around and administer continual admonitions and to exert the constant influence of affection. The laws will be obeyed or punishment will follow. The habit of obedience needs to be established. Much of the work of the school needs to be done when the teacher directs, and because he directs. There is no time for persuasion, no time for explanations, or reasons. The sufficient motive is the will of the teacher. Make this felt as an irresistible force.

Be careful to discriminate between indolence and crime, and between love of fun and malice. Not every trick in school is designed to annoy the teacher. Always assume that the pupil was acting under the influence of the better motive. Give full credit for everything good that is done. Give credit for unsuccessful efforts to do well. Never blame pupils for the results of stupidity. Taunting a pupil with his dullness never makes him

bright; it only makes him hate you. Few pupils are so stupid as not to know that they ought not to be blamed for their stupidity.

But after due allowance has been made for the waywardness of human nature, for natural love of sport, and for stupidity, hold every pupil responsible for the results of his own conduct. Let your displeasure be instantly felt, if a pupil is inattentive, idle, or disobedient. Crime is to be punished in school as well as out. School is not a place for amusement merely. It is a place for work as well. It is a place for forming habits of industry and obedience. It is a place for becoming acquainted with the serious side of life. How can a child learn the duty of self-control if he is continually controlled by another? My own judgment is that we have gone too far in our efforts to avoid the tyranny of the old-fashioned schoolmaster. We are not to be brutal; we are not to be severe; but we are to enforce our authority. I know that a long and strong movement has been made against corporal punishment. I sympathize with this. Much good has come from it, and much more is to come. But while waiting for the coming good, we must not raise up a generation of lawless citizens. I believe we sometimes destroy a boy's respect for law by permitting him perpetually to break laws with impunity. Ordinances of the state, or of the school committee do not at once change the nature of children, or the customs of society. And then I think it will be a long time before children will be so much wiser and better than full-grown men as to need no compulsion to cause them to do their duty. Is a record of punishment required? and do you fear the effect of the record? My advice is to make history first, and write it afterwards. Know your duty; do your duty; and then, if necessary, tell what you have done. More than this, — the neglect of one punishment often causes four; if not by you, by a more conscientious and less timid teacher into whose hands the unpunished pupil subsequently comes.

Authority should be a powerful means of discipline in school. Authority should be enforced by sufficient means. And yet, authority should be a constantly decreasing force. Authority should be so blended with other means of enforcing discipline as to be felt less and less by the pupils.

5. My next advice is to combine persuasion and authority. If one pupil does wrong, and you are even compelled to inflict severe punishment upon him, do not blame those who are innocent.

It is very difficult for many teachers to act as they ought to act towards wrong-doers, and at the same time feel as kindly as they ought towards those who do well. Never allow yourself to be vexed with wayward pupils. Learn to look upon the misdoings of youth as defects to be cured, rather than as personal grievances that are to be avenged. There are two quite distinct types of school government, the severe and the mild. Some attempt to govern exclusively by authority and compulsion, others by persuasion and gentleness. Some keep the sense of fear in the background, if not in the foreground; others rely upon love to hold the class to right conduct. Either mode of government is wrong. Were I compelled to take my choice between severe discipline and discipline without authority, I should choose that discipline which insisted upon order. In our efforts to avoid severity we are in danger of giving up all authority. No child ought to be allowed to grow up with the belief that his own self-gratification is to be the rule of his conduct. We are social beings, and should be taught to respect the rights of others, whether it is agreeable or disagreeable. Let the severity of authority be tempered with the mildness of persuasion and love. Let these two elements of good discipline be ever present, — sweetness and power.

6. Let patience have her perfect work. Fret not thyself on account of evil doers. Be not discouraged if it takes time for the development of the power of self-control. It takes a good while for oaks to grow. They start from acorns. The process of development is exceedingly slow; but the mature tree is king of the forest. The strength that comes from long continued effort can not be created in a day. A two-year old steer cannot grow in a year.

Remember that there are some things for which teachers are not responsible. Remember the sage remark of the old doctor, when called to a very nervous patient, "It is too late; I should have been called to her grandmother." The influence of heredity is abiding. You cannot eradicate it. Heredity limits the effect of educational processes upon children. Do not attempt to overpass these limits. It is impossible to change the fruit of pear trees into apples by cultivation; but it does not follow from this that pears are not better for cultivation. So it is with children. Nature fixes the limits within which it is possible to cause changes;

but within these limits much may be done. The limitations of the body upon mental action is a fixed fact; but both body and mind may be much changed by the actions which they perform. It is possible to create power of action and habits of action by the use of power already possessed; and this fact gives us the key to the teacher's province, both in instruction and discipline. We must learn to limit our efforts to the possible, and not to fret over the impossible.

So, too, the bad effect of home training is beyond the teacher's control. The creation of new habits is a slow process; the eradication of old habits is still slower. Remember this, and be very patient in your efforts to create power of self-control in your pupils.

The secret of school discipline lies in the self-activity of honest work, stimulated by the sweetness and power of a patient spirit.

A STUDY OF MIDSUMMER NIGHT'S DREAM.

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THE Midsummer Night's Dream impresses one with Shakespeare's infinite variety. It differs greatly from the other plays, and losing it we should have missed one element of its author's genius. Had any of the Histories perished we could, nevertheless, have formulated Shakespeare's method from the others. Had As You Like It been lost one could have turned to Much Ado, and Twelfth Night. While if King Lear or Othello even had failed to reach us, we could find the same wonderful power exhibited in Hamlet.

But the Midsummer Night's Dream is unique. No other play could fill its place. The Tempest — the most like it — since it, too, deals with the world of spirits, is of a different tone. It is the work of experience and maturity. It reveals a deeper philosophy, and a loftier spirit. The Midsummer Night's Dream on the other hand, is the product of Shakespeare's early life — written when he was young in years and in heart. It is flooded with joy, and does not even recognize the existence of sorrow.

In structure, also, this play is peculiar. It resembles somewhat the masques so popular during the reigns of the last Tudors and

the first Stuarts. Like them it partakes of the nature of a pageant and unrolls before us a series of beautiful pictures. We do not, therefore, expect that minute analysis of character which distinguishes Shakespeare's other plays. But in its place we see the bold outlining peculiar and suitable to the masque.

Theseus and Hyppolyta, the royal couple serving as a background for the picture, are conceived on a broad scale. Shakespeare seems to have borrowed little more from Chaucer than their names and existence. The Queen is the less distinct in outline, and we learn little of her beyond the two facts that she is fond of hunting and is bored by the players. The character of Theseus, however, is more clearly drawn. He also is fond of the chase and takes pride in his hounds —

> "Slow in pursuit, but matched in mouth like bells,"

But this is a minor point. He is primarily ruler of Athens, and there is a breadth and power about him which harmonizes with his high position. He is the man of action in contradistinction with the man of theories. As such Shakespeare evidently admires him. But his admiration did not blind him to the limitations of such a character, for he puts into his mouth the famous misconception, "The lunatic, the lover and the poet, are of imagination all compact."

The Athenian lovers suggest the question of the limit of parental authority. This favorite problem of Shakespeare's is introduced in many plays, but stated most fully in Othello. There too we find Shakespeare's answer given most plainly in Desdemona's words —

> "And so much duty as my mother showed
> To you, preferring you before her father.
> So much I challenge that I may profess,
> Due to the Moor, — my lord."

These four lovers are scarcely to be distinguished one from another. We are able to perceive by close scrutiny that Hermia is the braver, Helena the more treacherous, Lysander the more courteous, and Demetreus the more brutal. We are reminded at once of the lovers in the play immediately preceeding this — Love's Labor's Lost! The poetry too is of the same immature tone. It contains none of Shakespeare's best work, and rises to the average only in Act III. scene 2, where Helena's indignation lends a temporary power and pathos to her speech.

From these stupid lovers we turn to Bottom, upon whom formerly much of the interest of the play centered. Shakespeare has spared no pains to present him to us as a perfect egotist. He thinks himself competent to play every part; he suggests the proper presentation of the Lion — The Wall and Moonshine. And he even settles the metre for the prologue. He is not at all abashed by the presence of the fairies, but is so rude that even the enamoured Titania says —

"Tie up my love's tongue, bring him silently."

Neither does he hesitate to correct Demetreus and the Duke in their conversation about the play. He recalls to us the other members of the group of egotists, the Schoolmaster in Love's Labor's Lost, Malvolio, Dogberry, and shall we add Falstaff? It is instructive to notice Shakespeare's frame of mind toward these men. They arouse mirth in him, not anger. They amuse him, but never irritate him. He apparently wonders that any men can be so foolish, and laughs long and loud at their ridiculous conceit.

The Pyramus and Thisbe which they enact serves a two-fold purpose. It is first, in its absurd circumstances, a parody upon the Athenian lovers. But it is more than that. It is also a satire upon plays presented up to and even during Shakespeare's time in the banqueting halls of the nobles, in inn yards, and even upon the stage of the regular theatres. It was by such plays as this that the public had been educated until it could appreciate Marlowe and Shakespeare, Ben Jonson and Fletcher.

The sarcasm is directed not so much at the play as at the players. Bottom and his companions leave nothing to be understood by the audience. Wall must have his lime and Moonshine his lanthoric. This rude presentation serves as an half apology from Shakespeare, for his endeavor to portray fairies and fairy land. In the words of Theseus, "The best in this kind are but shadows."

It is in the fairy scenes, however, that we find the best work of the play. Other writers of masques, Lily with his followers and later Ben Jonson and his school were fond of introducing the gods and goddesses of Olympus. Cupid and Venus, Diana and Apollo were constant figures upon the stage. But Shakespeare with more originality passed them by in favor of the fairies. Instead of the mythology of the Romans and the Greeks, he turned to the Folk-lore of his native land.

Most poets would hardly attempt to discriminate in describing people who creep into acorn cups, but nothing is too difficult for Shakespeare. The distinguishing characteristic of each fairy is clearly marked. Oberon is obstinate, Titania teasing and most dainty, while Puck, the jester, is the blunderer from whose mistakes all the troubles of the play arise.

The fairies have honored certain truths in common. They have no power of reflection. They do not think about their actions and calculate the consequences. They also lack a moral nature. It would not be just to call them immoral for they have no conception of right and wrong. They are simply unmoral, they are entirely sensuous, and they attract instead of repel only because their senses are so delicate and refined. The spiritual has no effect upon them and they influence mortals only through the material world. The only feeling of pain experienced by any of them is the jealousy of Oberon — and that we imagine in vulgar mortals would be considered an obstinate determination to have his own way, rather than a romantic feeling.

It is in their conversation that Shakespeare touches the highest point of poetry in the play. It is the fairy who sings —

> "Over dell, over dale,
> Through bush, through brier;
> Over park, over pale,
> Through flood, through fire
> I do wander every where."

And no mortal equals Oberon's famous description,

> "I know a bank where the wild thyme blows,
> Where oxlips and the nodding violet grows."

These fairies are not, strictly speaking, Shakespeare's creation. They were the subjects of the fireside stories among the rural population and had been written of in legend and ballad. Shakespeare showed his genius not by originating this material, but by infusing into it new life. He ignored the Scandinavian and Scottish myths which represent the fairies as malignant elves, but followed closely the common English conception of them. He gave them the traits which every old wife in Warwickshire assigned to them. In accordance with the popular tradition he endowed them with youth and beauty. He remembered their reputed fondness for running water and their ability to assume various forms, and to move rapidly. Their special delight was to

play tricks upon mortals, and the one most apt in this was Puck, or as he was more generally known, Robin Goodfellow. He it is who frights the "maidens of the villagery," who "skims milk," and "misleads night wanderers." He takes pride in his pranks and acknowledges that

> "Those things do best please me
> That befall preposterously."

In introducing the fairies to the stage, Shakespeare introduced them to all future literature. It is interesting to note the most prominent authors who have taken up this subject, and the manner in which they have done it. Passing by Browne's Pastorals, and the sly political hints in Corbett's work we come directly to Drayton. His Nymphidia was at one time assigned to a period previous to the Midsummer Night's Dream, but recent authorities have finally placed it later. The most casual reader will be struck with his indebtedness to Shakespeare. He describes the same kind of a fairy, dealing, however, more with the appearance than with the character. While the poetry is inferior to that of his model, it is nevertheless attractive, — the arming of Pigwiggen being especially good, —

> "His helmet was a beetle's head,
> And for a plume a horse's hair
> Which being tossed by the air,
> Had force to strike his foe with fear
> And turn his weapon from him."

Herrick, half a century later said,

> "I sing —
> The court of Mab and of the Fairy-King,"

and so he did, in exactly the same manner as Drayton. His descriptions are minute and elaborate. He refers also to the popular idea of the exceeding madness of the fairies,

> "If ye will with Mab find grace
> Sweep your house; who doth not so
> Mab will pinch her by the toe."

The best single poem, however, descriptive of Puck is Robin Goodfellow, assigned by most authorities to Jonson. His Robin plays all the merry pranks and shows all the sportiveness of Shakespeare's Puck. But these poems labor under the disadvantage of lack of contrast. In order to appreciate the fairies we

need to see them side by side with "human mortals." Titania's daintiness needs the contrast of Bottom's uncouthness.

In the drama only is this juxtaposition possible, and therefore we turn to the dramatists for the best delineation of the fairies. Jonson in the masque of Oberon, the work in which the fairy element is most conspicuous, shows us but little of the minor fairies. He refers to their fondness for the brooks, and mentions

> "The coarse and country fairy
> That doth haunt the hearth and dairy."

but he does not bring them before the audience. He concentrates his attention upon Oberon, but even here we learn of that "King of Shadows" rather by what is said about him, than by what he does or says himself. Jonson had evidently made a study of him. He had examined him carefully and written his description. But the portrayal lacks imagination. It is from the outside. The poet does not enter into his subject and his Oberon is a lay-figure.

Fletcher, in his Faithful Shepherdess, recalls Shakespeare more vividly. His lines often bear a striking resemblance. For instance the Satyr's first speech is one long imitation of the fairy's,

> "Over hill, over dale."

He cannot like Puck "put a girdle round about the earth in forty minutes," but he can fly "swifter than the fiery sun," or "faster than the wind."

The resemblance between the fairies is, however, principally in expression. Their characters are widely different. The Satyr is no trickster like Puck. He is the messenger of Pan, sent to guide the shepherds and to protect virtue in distress. He is kind and gentle. Like Robin he is a Will-o'-the-Wisp, but his purpose is to,

> "By a false fire seeming bright,
> Train them in and lead them right."

He rescues distressed maidens and is to a certain extent the good genius of the play.

As might be expected from the nature of the poet we find this idea developed to its greatest extent in Milton. To be sure, in L'Allegro and in Paradise Lost he refers briefly to the popular fairy — a tricksy merry creature — but in Comus where he presents one life size, he dwells upon the moral nature. The attendant spirit is, like the Satyr, a messenger of the gods, sent to pro-

tect the wandering maiden from the enchantments of Comus. His spiritual nature is so fully developed that he objects to mingling with mortals, and were not his errand so noble, he

> "Would not soil these pure ambrosial weeds
> With the rank vapors of this sinworn mould.

With this higher spiritual nature he combines some of the lower qualities. He can render himself invisible, he can assume other forms and can move with great rapidity. Milton's verse too approaches the extreme beauty of Shakespeare's even in describing mere motion, as can be seen in the attendant spirit's closing speech.

> "But now my task is smoothly done
> I can fly or I can run,
> Quickly to the green earth's end
> Where the bow'd welkin slow doth bend."

Interesting as it may be to note the changes made by other writers it is most interesting to see Shakespeare's own development. A comparison of Puck and Ariel shows the difference between Shakespeare's early and later conception. Ariel retains most of the qualities of the fairies of the Midsummer Night's Dream. He becomes a sea nymph, and sings to draw Ferdinand toward Miranda. He becomes invisible and causes trouble between Stephano and Trinculo — and again he becomes a harpy to aid in rebuking Alonzo. His quickness also is noticed. He will be back "Before you can say 'come' and 'go' and breathe twice."

But to these attributes Shakespeare has added others in which Puck was deficient. Ariel has human feelings. He wants recognition and approbation. He reminds Prospero — "Sir, all this service have I done since I went," and when he imagines that he is neglected he asks, "Was 't well done?" His desire for affection comes out very prettily when he asks,

> "Do you love me, master? No?"

But strongest of all is his desire for liberty. He speaks to Prospero of it several times and evidently looks forward to it as the reward of his obedience.

This fact of his servitude is made to emphasize his moral nature. Prospero reminds him that he rescued him from the cloven pine within which he had been painfully imprisoned twelve years by Sycorax, because he

"Was a spirit too delicate
To act her earthy and abhorred commands."

All his services for Prospero have a worthy motive. His errands, his songs, his transformations are to restore Milan to its rightful ruler, to prevent murder and to reconcile the brothers.

In the years that elapsed between the Midsummer Night's Dream and the Tempest, Shakespeare's conception of the fairy seems to have grown in depth and beauty. He has given them human feelings to draw them nearer mortals. The morality with which he has endowed them does not separate them from mankind. By the addition of these traits he has transformed the sportive Puck into the lovable Ariel.

SHALL AND WILL.

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OF all the much discussed topics in English speech it is probable that none has received greater attention than the use of those two unregenerate auxiliaries which have proved a stumbling block and a rock of offence to all persons ambitious enough to busy their thoughts with the future, rather than with the present and the past. The reason for this is not hard to discover. The employment of *shall* and *will*, and of their preterites, *should* and *would*, constitutes, probably, the most difficult single point of usage in English — difficult not merely to foreigners, in whose own language no such peculiarity exists, but to those who are native and to the manner born, and who have spoken English from the time when they first learned to lisp the words pronounced by their mothers or their nurses in babyhood. The learned and the ignorant meet here on a common ground of fallibility and error, for while many a man can be found to give with perfect accuracy all the rules for the Latin subjunctive, not one in a thousand could state satisfactorily any principle for our guidance in the use of *shall* and *will*, beyond the trite precept that the former is the auxiliary for the future in the first person of both numbers and the latter in the second and the third — a precept so defective and misleading as to be utterly false in a large proportion of the cases met with in actual discourse. The careful student must have observed that in no small number of instances

shall is the auxiliary for futurity, pure and simple in both the second and the third person, and that in some cases even *will* may be used in the same way in the first.

Most of the discussions of these auxiliaries now-a-days start with the fundamental meaning of the words, and from this attempt to deduce principles to guide us in using them correctly. *Shall*, they inform us, is from the Anglo-Saxon *sculan*, and denotes obligation or duty, the recognition of which leads us, under a naive sentiment of honor, to assert merely our duty in the matter, leaving it to the world's sublime faith in us to understand that what we ought to do is a thing that we cannot neglect to perform. In like manner we are told that *will* is from the Anglo-Saxon *willan*, and denotes purpose or inclination, its use gallantly hinting to another that what he decides or is inclined to do cannot of course fail of accomplishment.

Now, however suggestive such a mode of presentation may be as enabling us to understand the subject, historically, it is of little or no value in teaching the correct employment of these words in spoken and written discourse. One may know all this and yet go on confusing them to the end of his days. For the practical student a succinct and well-classified statement of the actual usage of the language in regard to them is of more value than any amount of speculation as to the process by which they have come to be as they are.

Another defect of the prevailing method of discussion lies in its failure adequately to distinguish the different kinds of clauses in which these auxiliaries are found. Broad and general rules are given, as if of universal application, when perhaps they are true of only certain clauses, and quite inapplicable to others. Such a mode of treatment is much the same as if a Latin teacher should tell his pupils that the subjunctive mood is to be used whenever the thought is hypothetical or doubtful, without attempting to discriminate the different kinds of clauses with which they have to deal. The discussion of the future auxiliaries in English must proceed with similar exactness, taking into equally careful consideration the nature of the clauses employed. Indeed, there is no other principle that the student can follow with any practical result, and by this the lines of distinction are so sharply drawn, that he who has once mastered them may feel as much at home, and possess as strict and definite rules for his guidance, as does the diligent Latinist in the use of his moods and tenses.

In the following discussion we shall pursue the method of presentation thus indicated, first dividing clauses into the two great classes of principal and subordinate, and then considering the different kinds of each. The discussion will be considerably simplified if the reader will fix in his mind two fundamental meanings for each of the auxiliaries under consideration, besides their function as denoting merely future time. These two meanings are: for *will*, (a) consent or willingness, (b) resolution; for *shall*, (a) a strong assurance, (b) an exercise of authority.

With these preliminary remarks let us proceed to the analysis of the subject.

A. Principal Clauses.

I. *Declarative aud Exclamatory Clauses.*

1. *Shall* in the first person, *will* in the second and the third, express simple futurity.

a. *Will* in the second and the third person is sometimes employed for the imperative, especially in addressing military inferiors:

"On the receipt of this message, you *will* take a detachment of troops and at once occupy the town."

"Your men *will* hold themselves in readiness to march at a moment's notice."

2. *Will* always in the first person, and often in the second and the third, expresses either —

a. *Consent or willingness.* In the first person it is the form regularly used in promises:

"I *will* yield the point." "I *will* come to-morrow, if you desire."

"He *will* do as you wish."

b. *Resolution.*

"I *will* not go." "I *will* do it, or *will* lose my life in the attempt."

"Ye *will* not come to me, that ye might have life."[1]

"He *will* have his way in spite of consequences."

3. *Shall* in the second and the third person expresses —

a. *A strong assurance*, whether a promise, a threat, or the emphatic assertion of a fact:

"You *shall* see me again."

"He *shall* be punished for his crime."

[1] John 5:40.

"There is not a girl in town, but, let her have her will in going to a mask, and she *shall* dress like a shepherdess." [1]

b. An exercise of authority on the part of the speaker:

"You *shall* come with me in spite of prayers or threats."

"You *shall* go, and he *shall* soon follow you."

A fine distinction is often expressed by the combination of *shall* and *will* in the same sentence:

"I *shall* supply you with money now, and I *will* furnish you with a reasonable sum from time to time, on your application to me by letter." [2]

"All persons who *shall* be taken with arms in their hands within these lines *shall* be tried by court-martial, and, if found guilty, *will* be shot." [3]

II. *Interrogative Clauses.*

1. *Shall* in the first and the second person, and *will* in the third, express simple futurity.

"*Shall* I see you soon?"

"*Shall* you go to Rome this summer?"

"*Will* they return at once?"

2. *Shall* in the first and the third person also at times indicates authority on the part of the person spoken to, or gives him the right to decide the point in question:

"*Shall* we come with you?" "*Shall* I read you the story?"

"*Shall* he go with us?" "*Shall* they be ordered to leave the town?"

3. In questions, as in declarative sentences, *shall* may be used in the third person to emphasize the fact.

"*Shall* not the Judge of all the earth do right?" [4]

"For what *shall* it profit a man, if he shall gain the whole world and lose his own soul?" [5]

Observe the nice distinction between *shall* and *will* in the following passage:

"It justly fastened itself upon the rebellion, and demanded new and severer punishment of the rebels, instead of the magnanimous reconciliation which the beloved president, of whom it had been bereaved, had recommended. Who *will* say that this sentiment was unnatural? Who *shall* say that it is even unjust?" [6]

[1] Addison, *The Spectator.* [2] George Eliot, *Middlemarch.* [3] Fremont *Proclamation.* [4] Genesis 18:25. [5] Mark 8:26. [6] Quoted by Richard Grant White, *Words and their Uses.*

4. *Will* in the second person indicates consent or resolution. In the first person it can hardly be used.

"*Will* you go with me?" "*Will* you allow me to show you these engravings?"

B. SUBORDINATE CLAUSES.

I. Clauses of *cause*, *concession*, *result* and *comparison* follow the rule for declarative clauses:

"I have no fear, since I *shall* soon be beyond his reach."

"You need feel no anxiety, for you *will* receive help from your friends."

"I will accept it, although I *shall* have no use for it."

"Although he *will* be made to see his fault, he will not confess it."

"I am so well provided for, that I *shall* not need your assistance."

"They are so unreasonable, that they *will* never consent to it."

"He is happier than you *will* be a year hence."

"He is not so wise as they *will* shortly wish him to have been."

a. Here, as in declarative clauses *shall* may be used to denote authority, to express a strong assurance, or to emphasize the fact:

"You will never see him again, though you *shall* hear of his success."

"Although all *shall* be offended, yet will not I."[1]

II. In clauses of *time*, *place*, *condition*, *purpose* and *manner*, *shall* expresses futurity in all persons, though the present tense — in clauses of purpose the present potential — is generally used, unless the future is to be marked with particular exactness:

"When He shall appear we shall be like Him."[2]

> "Till the oak that fell last winter
> *Shall* uprear its shattered stem,
> Wives and mothers of Dunedin,
> Ye may look in vain for them."[3]

"Where a single man *shall* be found to hate oppression, there tyrants will ever have a foe."

"If you *shall* doubt it, I will find a way to convince you."

"I will receive him as before, provided he *shall* not repeat the offence."

"I will send five regiments, in order that you *shall* not be without reserves."

[1] Mark 14:29. [2] 1 John 3:2. [3] Aytoun, *Edinburgh after Flodden.*

"Do as you *shall* see fit."

"He will give according as he *shall* be able."

"They will not stop to dress, but will all come as they *shall* find themselves at the time."

a. *Will* in all persons expresses consent or resolution:

"He *will* come when I *will* consent to see him."

"I shall wait till you *will* go with me."

"If he *will* not listen, it is useless for me to speak."

III. *Relative Clauses* vary the verb according to their nature:

1. *Ampliative* relative clauses follow the rule for declarative clauses.

"I, who *shall* soon be old, am less eager for fame."

"You, general, who *will* succeed where most men fail, should not demand too much of those less able than yourself."

"His success, which *will* not be great, may still be creditable."

2. *Restrictive* relative clauses —

i. Follow the same rule when the antecedent is definite:

"The amount that *will* satisfy him is not large."

"The persons who *will* be most surprised by such an event are the ones that now profess to expect it."

"The man that he *will* meet there is a consummate coward."

ii. Take *shall* in all persons when the antecedent is indefinite or general:

"All persons [i. e., any persons whatever] who *shall* be taken with arms in their hands . . . . will be shot."

"For every man [i. e., any man whatever] that you *shall* kill I will execute three."

"The man who *shall* teach such doctrines will be regarded as the foe of society."

a. The same principle is seen in the case of the indefinite relatives.

"Blessed is he, whosoever *shall* not be offended in me."[1]

"Whosoever *shall* fall upon that stone shall be broken; but on whomsoever it *shall* fall, it will grind him to powder."[2]

b. Relative adverbs of place and time, as *where*, *wherever*, *whither*, *whence*, *when*, *whenever*, etc., often take the place of relative pronouns, both ampliative and restrictive. In such cases they of course follow the rule for the pronoun represented.

"He will meet them at some future time, when [i. e., at which] he *will* lay before them the whole matter."

[1] Matthew 11:6. [2] Luke 20:18.

"It is a place where [i. e., in which] regrets *will* be in vain."

"In cases where [i. e., in all cases whatever in which] supplies *shall* be lacking, the army will be compelled to maintain itself from the conquered country."

"Whenever [i. e., at any time whatever at which] any of them *shall* be captured, he will be shot."

c. *Will* in the second class of restrictive relative clauses, expresses consent or resolution:

"All who *will* accept these terms shall be pardoned."

"Every man who *will* take such a risk must abide by the result."

IV. *Substantive* Clauses, in the use of these auxiliaries, may be divided into three classes:

1. Clauses introduced by *that* after verbs of *knowing*, *saying*, *thinking*, *fearing*, etc., follow the rule for declarative clauses.

"You know that he *will* be here in a month."

"He says that we *shall* see him in Paris."

"By such a course he thinks that they *will* escape."

"I fear that they *will* leave us."

a. *Shall* in this class of substantive clauses, expresses a strong assurance, or emphasizes the fact:

"I know that my Redeemer liveth, and that he *shall* stand at the latter day upon the earth."[1]

"I have told him that he *shall* never lack a defender while I live."

b. When the subject of the subordinate clause is the same as that of the principal clause, *shall* is employed in the second and the third person when the thought is regarded from the point of view of the person saying, thinking, fearing, etc.

"You think that you *shall* soon be free."

"He fears that he *shall* be attacked by robbers."

c. When the subject of the subordinate clause is different from that of the principal clause, *will* may be used in precisely the same way in the first person:

"He says that I *will* visit Rome within a year."

"They think that I *will* flee."

2. Clauses introduced by *that* after verbs which denote or imply an act of the will, use *shall* in all persons to express futurity. In such clauses *will* can hardly be employed in any sense.

[1] Job 19:25.

Such verbs are those meaning *to wish, to desire, to be anxious, to be willing* or *unwilling, to intend, to prefer, to permit, to prohibit, to stipulate, to decide, to determine, to decree, to command, to direct, to request, to urge, to charge, to demand, to take care, to see to it,* etc.:

"It is my desire that you *shall* not be kept in ignorance."

"The commander has stipulated that none but able-bodied men *shall* be sent him."

"They have given orders that he *shall* be tried by a court marshal."

3. Indirect questions follow the rule for declarative clauses; but in the second and the third person *shall* may be employed when the subject of the subordinate clause is the same as that of the principal clause. The principle here is the same as in B, IV, 1, *b*:

"I wonder when you *will* come."

"You are uncertain when you *shall* [or *will*] be permitted to depart."

"He asks whether he *shall* [or *will*] find me at home."

"They do not know when he *will* return."

The following passages show faulty use of these auxiliaries:

"Without attending to this, we *will* be at a loss in understanding several passages in the classics, which relate to public speaking, and the theatrical entertainments of the ancients."[1]

"If I draw a catgut or any other cord to a great length between my fingers, I *will* make it smaller than before."[2]

"Mr. Thornton was without any suite, as it is intended that the staff or legation formerly attached to Sir Frederick Bruce *will* act under the orders of Mr. Thornton, until further news from the foreign office."[3]

"*Shall* the material universe be destroyed?"[4]

"He refrains from expressing his opinion from fear that he *will* be opposed."

"Often a young man does not go to college, because he is afraid that he *will* be raised above his business."[5]

"A lesson has been taught, the memory of which will live long after the other issues of this campaign *will* be forgotten."[6]

[1] Blair, Lectures on Rhetoric. [2] Goldsmith. [3] Quoted by Richard Grant White, *Words and their Uses.* [4] Question discussed by a Scotch Debating Society. [5] Quoted by A. S. Hill, *Principles of Rhetoric.* [6] Daily Paper.

"*Should* and *would*, being merely the imperfect tense of *shall* and *will*, are, in general, subject to the same rules. But the following peculiarities should be noted: —

a. *Should* often expresses duty or obligation in all persons, being the equivalent of *ought to*.

"*Should* I go or stay?"

"One *should* never be guilty of such an act."

b. "*Should* is sometimes used in a substantive clause, where the indicative form, if employed, would be *will* not *shall*:

"I am sorry that you *will* be disappointed;" "I was sorry that you *should* be disappointed."

"I regret that he *will* never see his father again;" "I regret that he *should* never see his father again."

c. *Would* is frequently used to express customary action:

"On summer afternoons he *would* sit in the door and recount the exploits of that famous day."

d. *Would that*, often with subject omitted, is used in wishes:

"*Would that* he were here!"

> "She only said, 'The day is dreary,
> He cometh not,' she said;
> She said, 'I am aweary, aweary,
> I *would that* I were dead!'"[1]

f. *Would have*, followed by an infinitive, is used to express a desire or preference: —

"I *would have* him die, or live without dishonor."

The following quotations illustrate the misuse of *should* and *would*:

"If I should declare them and speak of them, they *should* be more than I am able to express."[2]

"In judging only from the nature of things, and without the surer aid of revelation, one *should* be apt to embrace the opinion of Diodorus Siculus."[3]

"This man was taken of the Jews, and *should* have been killed of them."[4]

"It was requested that no persons *would* leave their seats during dinner."[5]

"They intended making no suggestions or recommendations further than that, if Pennsylvania was to be represented, the

[1] Tennyson, *Mariana*. [2] Book of Common Prayer. [3] Warburton, *Divine Legation*. [4] Acts 23:27. [5] Richard Grant White, *Words and their Uses*.

appointment *would* be given to a man who *should* be known as an unflinching supporter of the Republican party."[1]

"Now I *would* have thought that these were just the people who *should* have been the most welcome.'"

The reason for this variation in the different kinds of clauses is difficult to understand. It lies too deep in the nature of the thought to be discussed in the present article, the object of which is to state the mere facts in the case, not to trace their history or to discuss the psychological basis of the differences pointed out. But few words, therefore, are necessary in explanation of the foregoing treatment. If the examples used to illustrate the several principles are set aside, it will be seen that the whole discussion has to do with only three classes of principal clauses and four of subordinate. It is therefore quite within bounds to say, that any intelligent person who is willing to devote an hour's study to mastering the outlines of the subject, and two or three half hours more at different times to reviewing them, may so fix in his mind the usage of the language in regard to these perplexing words, as to be sure of employing them with confidence and correctness for the remainder of his life.

WHAT IS READING?

SUPT. OREN T. SNOW, BATAVIA, ILLINOIS.

READING is usually classified in pedagogic discussion as oral reading and silent reading. The former should give such a rendition of the thought and feeling of the author, as will make the same intelligible to the hearer. The latter should confer a complete mastery of these upon the reader.

The teacher's success or failure in teaching reading is usually based, so far as the public estimate is concerned, upon the oral method. The reason for this is not far to seek. Visiting parents and members of the Board of Education can easily enter into the spirit of the exercise; whereas, the same pupils would command less attention in a silent reading exercise, or, indeed, in one in arithmetic, grammar, or geography. Possibly to this fact is due the practice of the placing of new and difficult words at the begin-

[1] Quoted by A. S. Hill, *Principles of Rhetoric.*

ning of the lesson, instead of leaving them to be first encountered in the text. Surely there can be no good reason for this arrangement. The meaning of words can best be learned by the general significance of the sentence, and not by formal definition. Knowledge, and *not its display*, is the primary consideration.

There is danger, too, that selections for reading may be assigned the class that are too full of the hidden beauties of thought and imagination to be fully comprehended by the pupils. Perhaps, however, it would be better to say that in such cases the danger is that the teacher will demand too much of the pupil. We all have a feeling that we should be thorough — that we should go to the bottom of things. There is a strong desire that the class should thoroughly enjoy the inmost beauties of the selection. But the teacher must take counsel of his sober judgment, and stay his hand before he passes the limit of capacity, and therefore of enjoyment on the part of the pupils. It is not necessary that the selections should be read *seriatim*. This is especially true in the higher numbers of the series of readers.

Classes differ in their characteristics. No teacher pursues exactly the same method with the successive classes. He has been silently reading between the lines of his course. He may have discovered that too much has been required in reading some of the selections. He has, perhaps, not so much followed the devices and desires of his own heart as he has acted upon the advice of others, supposed to be more competent. Thus he may have found it suggested that pupils should be thoroughly questioned upon the characteristics of the piece. Now to question thoroughly with reference to the selection under consideration is one thing, but to question with reference to the capacity of the class to see and enjoy its beauties, is quite another. It is then possibly a mistake to append to selections in the readers a long list of questions, as samples of what should be expected of teachers in the management of their reading classes. Surely, any teacher will see as much in the exercise as there is time, or capacity on the part of the class, to consider. We learn to read by reading, rather than by talking about it, or by getting ready to do it at some other time.

There is reason for fearing that reading in our schools has been made to carry too many burdens of late years. One of these burdens is the idea of the elocutionist that every shade of thought

and feeling must be clearly set forth in the vocal rendition. This has already been noticed. Another is a consideration of geographical and historical allusions. Still another is the calling attention to the rhetorical figures found in the exercise. It is by no means intended to throw discredit upon the value of these studies, but the maxims of the old professor of mathematics at West Point, "Teach one thing at a time and teach that thing well," was a good one. There is a time to dance and a time to pray. Of course, it will be remembered by all that he added: "Teach its connection with other things." There can be no objection to this in the reading, when the reading is well done.

Of course children should be encouraged to remember the dates of prominent events and to know the location of places named in their general reading, at home and in school; but, in the class recitation, the *thought* of the author is what the pupil is expected to know and express, without the diversions referred to, and even this under limitations, proportionate to the age and advancement of the class. A word here for the poor reader. Is it not a great mistake to permit or force him to occupy an undue portion of the time of the exercise? It is mortifying to the pupil and in no sense beneficial to the other members of the class. There is, commonly, too, a class sympathy for such unfortunates that reacts against the rigid teacher. Such cases have come under my notice, *et quorum, pars fui.* Additional reading in the lower grades may furnish some remedy. Quantity in oral reading is a large factor of success. The general information items of the reading lessons may, however, receive some attention, and should receive it.

It is well to gather up the fragments that nothing be lost. Can this be done in a way not prejudicial to success in the reading lessons? Why not set apart some time in which items of interest, necessarily omitted, may be fully discussed? If they are worth the time, let us give them the time. Questions may be written upon the board, calling for the desired information. These may remain upon the board during the week, and their discussion called for on rhetorical days, or at any time, specially assigned for that purpose. Pronunciation matches have been recommended, as the best way of securing improvement in that direction, and this suggestion seems to have won a general approval. Moreover, this approval is not confined to the teachers. It has been deemed an important literary as well as social exercise. Doubtless it will,

through the parents, react favorably upon the schools; for it is evident that the children of parents that read well, and therefore pronounce well, will the more easily acquire the same habits. How unequal, then, the contest, when the forty-five minutes per diem of the teacher alone has to make head against the avalanche of false syntax, for the rest of the day!

One brief diminution of the time to be devoted to actual oral reading is here reluctantly admitted. This is made in behalf of distinct articulation. A three-minute drill in phonics, premising that the class is under the influence of a competent teacher, will improve the rendition of the exercise, with comparatively little loss of time. It is a good muscular tonic for the vocal organs, somewhat analogous to the Delsarte exercises, now growing into favor for their influence upon movement and attitude.

Abundant oral reading will naturally lead to its own improvement. If there be any conspicuous failure in our schools, in this direction, it is not due to too much reading with too little criticism. Narrative and descriptive selections from the reading books may be used as a basis for essays. These, of course, should be such as have been read and appreciated in the class. Doubtless the pupil would be on the lookout for good material in that line during the daily readings, and his interest in the exercise would be greatly strengthened thereby, thus leading to an improved oral rendition — an important consideration.

The excellent literature of our best series of school readers cannot, in the nature of the case, give pupils all that is needed. They may deliver themselves with credit, within the range of that experience, and yet stumble quite seriously over the daily newspaper. Attempts have therefore been made, in some instances, to introduce the daily newspaper into the school-room, under certain restrictions, with the view of meeting this difficulty. This plan, however, may not prove feasible in all communities. The thought and the attempt have, nevertheless, not proved fruitless. The most interesting and instructive items from the daily press have been judiciously selected, and, with careful revision, offered in an attractive form, for the use of reading classes in the schools. I heartily endorse this worthy enterprise. It furnishes the missing link in the oral reading. But possibly it is mere trifling to speak of *links* in our school literature when great (?) minds from the "city of churches" are preparing to rend its whole chain into fragments.

In silent reading, the work of the teacher is more difficult. He must deal with results rather than with processes. It is no longer a consideration of vocal rendition. There is to be a measurement of the pupil's capacity for attention to the subject under consideration. Nor is it alone the natural capacity of the pupil that is here referred to, but also the capacity of habit and environment. With both of these the teacher has, or may have, much to do, for the pupil is withdrawn from other and, it may be, opposing influences, for at least five or six of his waking hours, and his activities can be restrained or directed during that period. The wise and determined teacher can, in most cases (I do not say in all), secure industrious application to the preparation of lessons. This is silent reading.

No one has really read that of which he can give no account. Thus the whole of preparation for recitation, in all the studies of the course, consists in the ability to read. In the arithmetical problem, can the pupil read its requirements, or does he blindly follow a method of solution? In the wider range of geometry, can he make an accurate picture, mental and physical, of the thing to be discussed, and thus obtain a basis of demonstration? In the algebraic problem, can he diagram its conditions? In physics, can he read nature in the language of experiment? Can he construct his rainbow with air-pump and appurtenances and determine the position of the observer? Can he ride without a pony into the rich preserves of Cicero and Virgil, and take pleasure in the excursion? Then he has learned to read, indeed, and has acquired a property of which he cannot be despoiled. Yet all this means willing work on the part of the pupil, with constancy and determination on the part of the teacher.

The influence of the family interest — for there will be a family interest — will materially strengthen the influence of the teacher. This is the highest endorsement he can have in the eyes of the pupil. The school has entered the home, and is welcome. There is another consideration. This is an age of public libraries. Every village has, or is to have one. Of the making of books there is no end. This is also a rushing business age. Parents are busy and anxious about worldly prospects. They pay tithes of mint, anise, and cummin, to have their children educated, and so relegate the whole affair to the teachers and school boards. Under these circumstances, the character of the home reading is likely

to be neglected. And now comes the public library with its wonderful attractions. The number of books taken and read is published in the local newspaper. There is congratulation. The village is becoming literary.

True, occasionally, some comment is made upon the comparative amount of fiction called for, and also the kind of fiction; but this excites only a little flurry of criticism and this important consideration is soon lost sight of. But it should not be forgotten. The public library habit of to-day is not one that cultivates close attention to any valuable thought. There is an eager rush for the latest fiction, and an eager rush through the volumes issued. This voracious appetite for highly-seasoned food, long indulged, is fatal to digestion. The capacity for attention to the thought of the author is not cultivated — nay, it is weakened by disuse. Would it be harsh or extravagant to say that in much of the fiction, of the kind under consideration, *there is no thought to which it would be worth while to pay attention?* The will and not the understanding is appealed to; the emotions, and not their analysis. It is not in the slightest degree intended herein to discredit fiction as a whole. It has its own legitimate field. It *is* intended to say that there is a habit of reading sensational fiction that greatly impairs the power of attention and thus exerts a most unfavorable influence upon the progress and interest of the pupil in his school-work. Is it not well, then, to demand of him attention to the miscellaneous work above referred to, and to emphasize this, by examinations thereon? This difficulty in securing the power of attention necessary to the reading of any article, is not confined to school children. How comes it, that the two great political parties of our country are so evenly divided on questions requiring logical discrimination?

Is the human intellect so dull that it cannot read two opposing articles on the relations of gold and silver, and form an opinion as to their respective degrees of truth? Or, that in two speeches on the subject of the tariff, by men of opposite political creeds, it cannot distinguish the truth? Or, that in debating the question of an author's rights of property in his works, there can be a division of sentiment?

Admitting that greed, self-interest, ambition, produce most of this conscienceless speciousness in argument, wherein is the safeguard of the people to be found? There is but one answer to

this question. They must be taught to read. The teacher must do his part. He must be ever on the alert to see that the pupil does his part, and he must manage to secure the coöperation of the parent. Doubtless, these are but ordinary institute platitudes, yet the teacher may well ask himself, and frequently, too: "Have I read this lesson in arithmetic, in grammar, in history? Can I lift it and the pupil with it out of the dead level of commonplace drudgery? Am I so familiar with its points of interest that I can put him on the alert for their discovery?" The pupil's energies will have been elicited when his interest is thoroughly aroused. *Then* he will begin the work of silent reading. His interest in the exercise will be the teacher's gauge of his own success.

That the teacher should fail, that he surely will fail, in individual cases, is not necessarily to his discredit. Usury upon the talent that is given him is all that can be required of any pupil, and the failures that still mar the recitation, under the wisest instruction, must be charged to the necessary evils of the graded system.

Nor is the failure of pupils to be *lightly* condemned. The dullest of pupils in some respects, may have capacities in other directions, outside of the teacher's requirements, that furnish ample compensation. Perhaps the method above alluded to of securing attention in silent reading may be brought more clearly before us by inserting some of the questions placed upon the board for discussion by the class, in one of our schools: —

1. Reasons for thinking that Germany will withdraw her prohibition of American pork.

2. Give an account of the Lake Minnetonka Mound.

3. Criticism of the *Century* upon the state control of the Yosemite Valley.

4. News in regard to the Iron Gates of the Danube.

5. Who are the parties to the Triple Alliance, and why was it formed?

6. Why is the position of the Sultan of Morocco very critical at this time?

7. What is meant by reciprocity in trade? How is it usually secured? What criticism upon this method?

8. What new European state is proposed, and why?

These questions and others not so closely connected with our subject are placed upon the board two or three days before the

time of their discussion, every week. There is also, usually, one reading lesson during the week, covering the ground, partially, of the questions on the board. This reading lesson, *oral*, is by the lowest of the three grades that are to discuss them.

The pupils, without exception, unless in cases where there are more than one from the same family, are subscribers to a paper containing the necessary information. Every pupil in the room is called upon, in his turn, to answer the questions upon the board. For convenience, as to limit of discussion by the pupils, and the greater frequency of each one's turn in answering, the pupils are divided into two sections, with separate teachers. The standing of the pupil is recorded. This, combined with the results of examinations at suitable intervals, constitutes their report in what may be appropriately called silent reading. One of the greatest advantages of this exercise, I repeat, is the discussion of the topics, in the family circle. This is sure to follow. The parents themselves, are often stimulated thereby to a fuller study of the important articles of the daily newspaper; and the children, through them, learn to look for something else, — occasionally, at least, besides the base ball scores, or the continued story. A word to those who may think of introducing the newspaper or some well annotated edition thereof, into the class-room. A difficulty may arise at once as to the politics of the paper. This may be met by taking the best of both kinds, in their turn, or at the same time. Of course, politics cannot be wholly eliminated, without great injury to the interest of the paper, and it is also very true that political discussion would elicit the best efforts of the class. One word to the teacher who may be disposed to make the experiment of trying a paper, properly edited for the school-room. There may be objections made to the expense. This is sure to be the case, in some instances, without the slightest regard to the moderateness of the price. Probably some one will go to the Board members and complain that it is a foolish enterprise — an unnecessary expense. He may add that "he has carefully examined the paper and will give his assurance that there is really nothing in it of any value." But let not the teacher abandon a worthy enterprise. The next year there will be few complaints, and the next, probably none at all. The excellent supplementary reading furnished by several publishing houses, has greatly extended the teacher's range of influence as to the character of the reading by the pupils, and at the same time proved a great

relief to them. It is the undoubted privilege and duty of every teacher who has anything to do with the subject of reading, to insist upon a generous supply of such additional matter as will relieve the tedium of several pieces and stimulate a love for the good, the true, and the beautiful in literature. If the present generation does not learn to read, it will not be for lack of an abundant supply of the best material in the most attractive form. True, our public libraries are well furnished, but we must look to the teacher first, the parent next, to lead the way to its enjoyment.

It is much easier to form than to reform any taste. The one who is an enthusiast, who thoroughly believes and diligently practises what he believes, is the one who succeeds in making converts to his faith. Have we, teachers, so cultivated the faculty of attention, that we can read and know what we have read? Can we read the articles of Blaine and Mills and Gladstone, and clearly discover the force of their arguments? Can, and do we read Lowell, and Thoreau, and Hawthorne, and Longfellow, and drink in the beauties of their every line? Then shall we the better teach others to read.

What is it to read? It is to stand beneath the cloudless sky of Egypt and Chaldea and discern in the glittering movements overhead, the beginnings of the science of astronomy. It is to gaze upon the bubbling throes of the teakettle until the mighty giant steps forth and does obeisance to his master. It is to see in the light of the electric flash a wondrous revelation as well as power. It is to look into the mysterious records of sonorous vibration until, under the spell of a magician greater than Champollion, their hieroglyphics are forced to give utterance to their own interpretation.

IN HIS NAME.

HARRIET EARHART MONROE.

THERE never was a time when society was trying to do so much for the poor and suffering as at the present time. It is possible that it is because we have a keener knowledge that the diseases and crimes which enter the backdoor of the hovel make their way out the front door of the palace. But most of all it is the spirit of the Mount of Olives, which is making the Brotherhood

of man and the Fatherhood of God a practical fact rather than a beautiful theory.

The Pestalozzi-Froebel House, situated at No. 16 Steinmetzer street, Berlin, Germany, probably is doing as far-reaching work in philanthropy as any school in the world. I cannot make this plain better than by describing a visit there, and then by sketching its history.

When I entered, I was met by Frauline Schepel the resident directress. The first thing which struck my attention was the difference in seating the children from the custom in American Kindergartens. A plain wooden desk of comfortable height, nothing more than a shelf six or eight feet long, with a bench back of it, seemed unlike our little chairs with a handsome table laid out in squares. Frauline Schepel said: "We do not approve of tables because we want all the children facing one way, not only so they may see the teacher but so that when we ask for the right hand it may come on the same side for each one."

The president, Madame Schrader, has the children, each month, have their training on one particular theme. This month they are considering the cow. They have a stable where that animal is kept. A class of ten or twelve is taken to see the cow, then she is milked in their presence, each child having some of the fresh milk to drink. They see the milk strained and set to gather cream. A picture of the cow is next shown them. The picture is cut out and each child traces two or three pictures of the cow on the paper, then it is traced with a needle, and another one traced with the pricking of a pin. The child is questioned as to what he has observed about the cow, until he can make a good description or story of it. When the milk sours, a gill of milk and cream is put in little churns, six or eight inches high, and they make butter. They also make cheese, and then have the butter and cheese for a breakfast. After this they see and help a little in a cool room with butter making on a larger scale. They clean their tiny churns and the milk vessels and the larger churn. Absolutely nothing is done for them which they can do themselves under the careful directions of kind, capable teachers. The children go to Zoological gardens and bring back grass for the cow and feed her, and probably understand more about her than most grown city people.

At ten o'clock all lessons cease for the second breakfast. The children have little lunch boxes, which the young teacher

hands around and with little wooden boards for plates, the teacher instructs them in the proprieties of the table.

The children are of the lowest of the working class. Children of coachmen, washerwomen, and house servants. They are taken at the age of two and a half years, and are kept until they are seven.

For the first two years their training is mainly directed play, yet they are taught obedience, truthfulness, neatness, color, form, manners. They are made happy and have healthful surroundings. They have two gardens, the first a foot or two deep with clean white sand, here they play just as children at the sea-shore, only guarded from rudeness by a teacher.

The second garden has in it peas, beans, radishes, lettuce, strawberries and flowers. The ground is in some degree prepared for them, but the sturdy little people do much themselves. They plant the seeds, weed, water and tend the plants. The day I was there, several children were very happy. They had radishes big enough to eat.

The children looked clean. If a child comes to school dirty the parent is notified. Arrangements are made to bathe children at the school. If the parent wishes the child bathed there, she sends clean clothes and one cent, and on Friday afternoon student teachers are instructed how to bathe a child properly. The student keeps the child for a term, and is responsible for the cleanliness and mending of each article of clothing.

They use also the usual Froebel occupations, but they keep constantly in view the principle that children like for their play the occupations of grown people. Therefore they make baskets, card-holders, wagons, toys, etc. No teacher gives finishing touches, puts on the ribbons, etc., as with us, the work is done by the child. They clear the table after luncheon and dinner, and scour the plates with sand-soap and brush. They empty the water, put up and take out the tools. Then they have songs and games as with us. From six to seven years of age they learn to read, write and combine numbers up to one hundred. At seven they enter the second year of the public schools.

About thirty young teachers from different parts of Germany, from England and Scotland, are there learning the Kindergarten system to start like institutions in other places. About twenty girls are learning the employment just to be better nurses and bonnes in families. They are instructed in hygiene, and impressed

with the nobility and responsibility of their places. Foster mothers for God's little children.

The upper rooms are fitted up for these two classes of girls to lodge and board. They do all the work, keeping the rooms clean and cooking for themselves. Each girl helps cook one day of the week, and pays about $7 per month. By paying one cent children are given dinner, and as the parents are busy, most of the children have dinner at the school. Thus the young teachers are given practical lessons in domestic economy.

The Empress Frederick is Protectress of this institution, as she is of so many others, and comes here once a month when she is in the city. She is also the loved friend and adviser of Frau Schrader, and Frauline Schepel. In the school of cookery above mentioned, young ladies of high families are also trained three days of the week. The Princess Victoria was their first pupil.

Frau Schrader gives practical lectures on all subjects which should be known to young women. They have shelves filled with preserves and canned fruits and vegetables, neatly labeled with name, compound, price, use, etc.

Frau Shrader is herself a genius, a woman of great heart and brain. She is the grand niece and pupil of Froebel, being young when he was old, she not only has all of his ideas but has improved upon them. She is known in America as Henrietta Breymann, who conducted a Kindergarten in Berlin, from 1867 to 1871, when she married Herr Carl Shrader, who is now a prominent railroad man and member of the Reichstag. Herr Shrader gave the grounds and house for the Kindergarten, a magnificent present when we consider even small lots in that part of the city bring a fabulous price.

The Kindergarten is supported by an association of philanthropic ladies and gentlemen, the fees paid by the children, and tuition fees paid by the young teachers and nurses.

In 1874, Frauline Annette Hamminck Schepel, one of Frau Schrader's pupils came to Berlin as resident directress. She is a woman of most benevolent countenance, kindly manners and charming presence, full of enthusiasm and love for her work. The young teachers revere and the children love her. Frau Schrader is indeed fortunate in having a friend and helper who equals herself in love for the work, and with ability to carry out every direction of her intelligent management. I presume the school is the best illustration of the plans of Froebel now existing.

EDITORIAL.

THE meeting of the Department of Superintendence, of the National Educational Association, at Brooklyn, N. Y., Feb. 16, 17, and 18 was a notable gathering. The plans for the convention had been carefully made by President Sabin of Iowa, Superintendent Maxwell of Brooklyn and their co-workers. The three days will prove memorable days to those who were in attendance. On the first day the following topics were considered:—"The Rural School Problem," "The Columbian Exposition," "The World's Educational Congress," "In Memoriam—John Hancock," "History and Literature in the Grammar Grades," and last, but by no means least, the discussion of the great question that is agitating Boston and New England—"Shortening and Enriching the Grammar School Course." These several discussions brought out an immense amount of the best educational talent from all parts of the country, representatives from about a dozen states participating. These included Doctor Harris of Washington, Superintendents Raab of Illinois, Draper of New York, Rounds of New Hampshire, Kiehle of Minnesota, Day of Cleveland, Ohio, Phillips of Birmingham, Ala., Brooks of Philadelphia; President Eliot of Harvard University and many others. The skillful address of Doctor Eliot, and the equally polished argument of Doctor Brooks, and the rejoinder of Doctor Eliot and the after-adjournment-conversation of the two men, were all thrusts with Damascus blades.

True logic, solid arguments, mingled with ingenious sophistry, brilliant repartee, and the sweet arrogance of pedagogical egotism,—all contributed to make a discussion at once interesting, entertaining, enlightening, and suggestive. It will long be remembered by many. The careful and intelligent presentation of facts which must govern the Educational Exhibit at Chicago next year, by Dr. Selim H. Peabody, the Chief of the Department of Liberal Arts, was a welcome and satisfactory address. On the second day came an elaborate presentation and discussion of the Kindergarten question; "What can be done to bring children on further in their studies before they leave school to go to work?" "School Statistics," and a broad and philosophical discussion from all sides of the question of "Manual Training" filled the day full—only leaving one short hour in the evening from 7.30 to 8.30 for a memorable but hurried visit and brief inspection through the various departments of that immense establishment—the Pratt Institute. This

visit convinced several hundred persons that the Pratt Institute is one of the broadest, wisest and most useful educational institutions that this country can show.

The last and the great day of the feast was devoted to one subject for each session, morning, afternoon and evening. "The Health of School Children as affected by School buildings" was considered in an elaborate paper by Dr. G. Stanley Hall, President of Clark University, Worcester, Mass., which was followed by an exceedingly lively and profitable discussion, participated in by a large number of persons from all parts of the country. In the afternoon the topic under consideration was "The Public Library." The paper was read by W. H. Brett, librarian of the public library, Cleveland, Ohio. The final session, Thursday evening, was devoted to "Exercises in Commemoration of the 300th anniversary of the birth of John Amos Comenius." Never in the history of this Association has there been a more lively meeting, or perhaps a more profitable one. It was participated in by a very large number of distinguished superintendents from all sections of the country. On the whole there was a more general agreement than usual, less extreme and radical views presented, and the subjects discussed were of a practical character and of the highest importance.

Dr. Edward Brooks, superintendent of the schools of Philadelphia, was elected president for the ensuing year, and Boston was decided upon by a unanimous vote, for the next place of meeting.

THERE has just been issued one of the most important educational biographies of the season, — the Life of John Hancock, edited by his friend, Prof. W. H. Venable. Perhaps no man of the group of distinguished superintendents of common schools in the old Northwest was better known, at the time of his sudden death, than John Hancock. In the thirty years of his school work in Ohio, he had ranged through every department of public education in that state, from the country district school to the state superintendency. Without special advantages of early education, he rose, by virtue of fine natural ability, indomitable energy, quick appreciation of the progressive features of the common school system, unswerving honesty of purpose and sterling qualities of personal character, from a local to a well-earned national reputation. In addition to these qualities, possessed by many educational workers who never receive their just recognition, Doctor Hancock was gifted with that essential accomplishment of ready tact, which distinguishes the successful from the unsuccessful public man. The work of school superintendency in our great American cities now demands a combination of gifts, acquirements and experience amounting to statesmanship. Especially in the great states of the West and South, where partisan

politics are the meat and drink even of the more intelligent classes, the duties of this position are multiplied almost beyond the ability of the most competent educator. Indeed, in many of these growing municipalities, it would seem almost an impossibility to retain any eminent superintendent of schools for a series of years, and too often this responsible office falls to the lot of a second-rate school man, possessed of the useful faculty of pleasing everybody, while the schools are given over to the strife of rival cliques of ambitious politicians. In the position of city superintendent of Cincinnati, Dayton and Chillicothe, Ohio, and as administrator of the state superintendency of education, in filling out the term of the deceased occupant of that post, Doctor Hancock displayed the most remarkable qualities; holding together almost irreconcilable elements and never leaving a position until a competent successor was sure of election. At the time of his death he was state superintendent of education, elect; chosen in a bitterly contested election, in which the opposition was victorious, himself almost left alone as a representative of the political party to which he owed his nomination. This esteem and confidence of the leading educators and school public of his state he owed largely to these admirable qualities. He knew, perhaps best of all our western educators, when a community was prepared for the introduction of improved methods of instruction. No school man was more indefatigable in the kindly and persistent "aid and comfort" by which a corps of teachers is instructed and encouraged to work in harmony towards a positive end. His death was almost a calamity in a state full of able school men; for, had he lived, it is probable that the important matters of county supervision, and the establishment of a State Normal school might have come to a satisfactory conclusion. During the past twenty-five years the state of Ohio, especially in city superintendency, has enjoyed the services of a remarkable group of men; White, Rickoff, Harvey, Hinsdale, Eaton, Burns, DeWolfe, Stevenson, Peaselee, Tappan and others only second to these in ability. None of them, now living, remain in their old position and all, at one time or another, have suffered from the baleful displeasure of the partisan political malignity that is still the curse of public school life through half the Union. But their work has not been lost if the recent statement of Governor McKinley is correct that Ohio, to-day, stands foremost of all the states in the number of children and youth in public schools in proportion to its population. Few books will be so valuable to the younger members of the teaching profession as this, and we predict for it a wide circulation and a great influence for good.

THE young Emperor of Germany has broken out in a new place, in his demand for a more stringent law for religious education in the public schools than already prevails. The plan seems to be that the Prussian children, whom this young gentleman evidently regards as his personal property, shall be parcelled out in convenient squads to the clergy of a few leading sects, for a more thorough drill and discipline in matters theological and ecclesiastical than they at present enjoy. For the large number whose parents either do not affect the membership of these denominations, or are liberally inclined on the subject of religious education by the state, is left the poor recourse of choosing the most agreeable among a class of instructors with whom they wish to have nothing to do. Whether the great and enlightened Prussian people will sit down meekly under this new turn of the screw remains to be seen. Indeed, it is already the wonder of christendom, how a people, in so many ways superior in culture, assuming the first rank in modern civilization, can endure the irritating, insolent and capricious despotism of such a ruler as this new sprig of royalty appears to be. But one fact is even less comprehensible, — that the president of Harvard and a committee of eminent professors and divines of Yale University, within the past five years, have both united in the recommendation of this bungling and antiquated device for the moral instruction of American youth, in the public schools, for American citizenship. If these eminent gentlemen could be gifted with a plain understanding of the way in which the American people regard their proposition, to call in the clergy of the different religious sects to give instruction in the common schools, we might be spared the periodical reiteration of what seems to be a fixed idea.

Does this plan also include the turning one of the scholars to a similar instruction by the prominent leaders of the anti-religious or unreligious sects, parties and cliques, whose contentions rival the zeal and violence of the over-zealous champions of sectarian Christianity? Verily, the people of the United States, in this matter, seem to be nearer the truth of the original gospel than many of these great scholars and divines who feel called upon to present, each his own recipe for dispensing with the whole people in favor of a class, numbering perhaps a hundredth part of the entire population and, in the public affairs of the country, by no means the most influential.

ONE of the most useful applications of the primary normal-school work in college instruction has come to our notice in the department of English language in the State Agricultural College of Virginia. The professor in English literature, history and kindred topics is Doctor Shiet, well known as former president of the Louisiana State Normal

School, afterwards professor of Pedagogy in the University of South Carolina. The New Dominion has received no greater educational lift within the present decade than by the advent of President McBryde and the group of promising young men that compose the faculty of this institution. And not the least valuable feature of the revised curriculum of the college is the drill in English composition and the writing of English, according to the well-known methods of the best elementary public schools, which the entire freshmen class receives. Not only is this a great advantage to the students, many of whom come to the institution with scant preparation for college work, but this exercise is becoming the most popular with the young men. If our great professors and experts could be made to realize the peculiar gratitude with which the teacher is forever regarded who searches out as with a lighted candle the most common and radical wants of his pupils and works away at the foundations, they would not only lay up treasures of affectionate respect for years to come, but would also achieve the most important result now demanded by the educational public, — the laying firm and broad the enduring foundations of the secondary and higher education in all portions of the country.

HOW easy it is to lose one's temper! And when lost what foolish, even wicked things people otherwise very respectable, will say. This has been emphasized to us by a letter recently received from a firm of newsdealers named D——, down in the little state of D——. Three times this firm wrote to us about the payment of one subscription, and set the date of payment. Some time beyond this date having passed, we reminded them of their promise only to be informed that they had sent the money to an entirely different address. But they inclosed a check for a somewhat less amount than that stipulated. Being reminded of the fact that there was a balance due, and that they were making us a great deal of trouble over a single subscription, they reply in language becoming a mule driver. We are informed by this genial firm that we are "cranks," "duffers," "asses" and, as if this language was too weak, "jackasses." Again, in an excess of heat not to be expected at this time of year, they declare that they would not give such people as we are "H — ll room." But we do not wish any *room* in that hot quarter. That is the last place in the whole universe where we shall apply for room. That this firm should control considerable room in that quarter is a painful surprise to us and, but for these various expressions in their correspondence, we should consider it the language of hyperbole. But we assure them that they can retain all the room in the quarter referred to for the use of them-

selves and friends We have carefully considered their communication, which far exceeds in billingsgate anything received at this office in all of our experience, and will try to profit by it. There is a proper courtesy which should never forsake us in making just business demands of even the most discourteous of men.

BUT discourtesy may crop out in the relations of an editor with a contributor. We hear a great deal of the sufferings of contributors, especially youthful ones, at the hands of editors. But who will set forth the other side. What right has Scribbler to a claim on a busy editor's time? If you take up the lawyer's or doctor's time he will send in a bill for services rendered. Why should not an editor when the tyro wastes his time or demands that he instantly read through a bulky communication which all his trained instincts warn him at once that he can never use. Has the editor no other duty than to attend to those who courteously, or imperiously demand his attention? Who has any sympathy for editorial delay? Old contributors and new are much alike in this matter. We had an amusing experience recently. Much sickness and pressing outside duties had made it impossible to look over the steadily increasing pile of MS. After a time we reached a well-written article by a former contributor to EDUCATION, and, after careful reading, wrote a note of acceptance. The next day brought us two cards from this author, one before and the other after receiving our note. In the former the article is demanded back in no uncertain terms. And it is added: "It is no longer at your service. I prefer its return. I have never before been so rudely treated." Now no discourtesy was intended. And the editor had been for weeks working literally day and night to catch up with all this accumulated work and had happened to get at and dispose of this MS. as this postal card was being written. A few hours later came a second card, saying: "I wrote unkindly this morning. Please consider it unwritten. Cordially yours," etc. And so our days pass. And the mill grinds. Dear friends we are all human. As a rule we all; financial agents, contributors, subscribers, editors, try, do we not, to do the right thing and treat each other kindly and courteously? Far removed from each other we often can not understand the reasons for delay and may be inclined to feel hurt or angry. As we think of all the kindly, helpful words which come day after day to our office we are surprised that the cold, unjust and discourteous words are after all so few. We hope as time passes there may be less and less need of any such.

CORRESPONDENCE.

Editor of EDUCATION: — For these last three years I have been closely connected with the financial management of a large boarding school, and have studied very carefully from a business standpoint the needs of this and similar institutions. It is a well known fact to those who are familiar with the internal economy of our boarding schools that their margin of profit is comparatively small. To endeavor to find the cause and suggest a remedy for this condition of affairs is the purpose of my letter. Primarily, the time and attention of those who are directly interested in the material prosperity of our schools are so fully occupied with educational matters that the business affairs of the schools cannot get the attention they deserve. I am assured that a large saving of money and a material lessening of business responsibility could be effected by a plan of *Co-operation* applied to our boarding schools. I would suggest that a number of large schools combine and appoint a thoroughly competent agent in New York, or the nearest large distributing centre, who would attend to the purchasing of their supplies, provisions, coal, etc. This could be done to a much greater advantage for a number of schools than is possible for any one individually. After careful inquiry I am satisfied that it would effect a saving of from 15 to 20 per cent in the cost of carrying on our schools.

I am yours truly,

New York. EXPERIENCE.

Editor of EDUCATION: — The objections to employing married women as teachers, as generally stated, are valueless and based upon a mistaken notion as to the function of the school. A married woman is wiser, and stronger, abler and more efficient than a single woman. Her powers when directed principally in the direction of teaching are great. She is worth more to any cause in which she engages than is her unmarried sister. When that cause is school, when all her forces are concentrated upon school, pupils and co-ordinate interests, she is an excellent teacher; when another interest is first in her heart, be that interest husband, children, home or social reform, her usefulness as a teacher is so crippled as to lead the authorities to dispense with her services. To object to a woman as teacher because she is married can have little reason; but the surroundings and interests of a married woman are more likely to be such as unfit her for good teaching than

are those of the single woman. That financial provision must be made for the young women of the neighborhood, presumes that not the efficiency of the school, but another consideration is first in the minds of the board. Much harm is annually done by turning the district school into a charity organization and appointing a teacher, because she, or her mother, her invalid father or crippled sister needs assistance. Such management is not creditable to the head whatever may be said of the heart. The only question that can properly be asked about a candidate is, "Can she and will she give us the best instruction and discipline for our children?" Whether she be married or single, Methodist or Catholic, native or foreign, are matters of secondary moment. The best possible school, as judged by those whose business it is to conduct schools, is the only proper objective before the School Board. Cases are within the knowledge of every one where married women are so situated as to be able to give a school their undivided attention. To experience, ripe age, knowledge of the world, and liberal culture they often add a love and zeal for the work of teaching not reached by younger and less experienced women. Whatever reasons may be advanced for refusing to employ married women, the fact of marriage is insufficient. AARON GOVE.

Denver, Col.

FOREIGN NOTES.

PRUSSIA.

The New Education Bill. — The new education bill prepared by the Minister of Public Instruction in Prussia, Von Zedlitz-Truetzschler, has created the most intense excitement throughout Germany. The clauses relating to religious instruction which are violently opposed by Liberal and Social Democrats are as follows: —

"In the organization of primary schools the question of religious confession shall, as far as possible, be acted upon. As a rule, children shall receive instruction from a teacher of their own creed. New primary schools shall only be instituted on a confessional basis. The existing schools will remain, except where in certain cases instructions to the contrary are given, in their present condition."

"If the number of children attending a school not of their confession exceeds thirty, the erection of a separate school may be ordered. If the number exceeds sixty, the erection of a school will be compulsory."

"Religious instruction will be imparted according to the teaching of the religious body to which the pupil belongs."

"No child belonging to any religious body recognized by the State

shall remain without religious instruction from a teacher of his own professional creed. Children who belong to a religious body recognized by the State, may be admitted to the religious instruction of another religion only by request of their parents or guardians. If the number of children of various confessions present in one school exceeds fifteen, the authorities shall be required, as far as possible, to impart special religious instruction to them severally. Children who do not belong to any religious body recognized by the State must take part in the religious instruction of the school if not exempted therefrom by the president of the province. This exemption must be granted if the authorities of the sect to which the pupil belongs, demand it, and at the same time bring proof that instruction will be imparted to the pupil by a qualified teacher of their sect. In schools appertaining to a particular confession, the teachers must all be subscribers to that confession. This proviso does not apply to teachers who may be specially engaged in a denominational school to impart religious instruction to certain pupils whose religion is not that of the majority. In cases where the appointment of such teachers for purely religious purposes would entail too much expense, license may be given to these teachers by the authorities to impart instruction on subjects which do not touch religion. The religious instruction in primary schools is to be directed by the various religious bodies. Instruction may only be given by duly qualified teachers. The clergymen charged by their respective religious bodies with the superintendence of the religious instruction have the right to be present while it is being administered, and may convince themselves by questions, that the teaching is being properly given and that the scholars are making progress. They may further, at the close of the lesson, correct or advise the teacher. In evangelical Catholic parishes the priest is, unless the higher church authorities issue special orders to the contrary, charged with the superintendence of the religious instruction within his parish. The exclusion of the superintendent of the religious instruction from a school is allowed if the instruction is palpably disturbed by his visit. The exclusion is decreed by order of the president of the province, who must state the reasons which have prompted his action."

This project has created scarcely less excitement in Belgium than in Germany. In the former country the non-sectarian or neutral school established under the Liberal programme has been supplanted everywhere outside of the cities by the church schools. The movement inaugurated in Germany will if successful, give a renewed impetus to intolerance in Belgium schools. The *Indépendence Belge*, commenting upon the bill says: —

"In effect it breaks completely with the system of neutral (i. e. un-sectarian) schools. In the confessional schools (i. e. denominational), supreme authority is accorded to the clergy. Those who know the profound antipathy existing between teachers educated in the spirit of the age, and the priest; those who recall the manner in which the priest has abused his authority, regard the project as a public danger. The priest will be the absolute master, he will have a decisive voice in

the examination of candidate teachers; his veto will prevent a teacher from serving an engagement in nearly every school; he will assist in the religious instruction, will examine pupils; will admonish and control the master, etc. Moreover, private clerical schools will be created and the youth of the future will be entirely subject to the will of the clergy."

It seems to be generally conceded that Catholicism would gain more than Protestantism from the success of the measure.

Apropos of this movement interest attaches to a declaration made in the Belgian Chamber in the course of a discussion over the education appropriations. It was charged that a text-book had been found in a school in Brussels which teaches that there is no God, and that we should concern ourselves alone with the study of works, (i. e. nature.)

MISCELLANEOUS NOTES.

Arbor-day, an American institution, has been inaugurated in Queensland, with *fêtes* at 368 schools, and the planting of 5,453 trees. Hereafter the celebration will take place on the first of May.

The Labor Commission, now in session in London, promises to bring out some interesting information as to the moral and industrial effects of the provision for half-time attendants upon elementary schools. This arrangement meets at once the demands of the compulsory school law and the need or greed which sends children to work in mills and factories. At a recent sitting, Mr. Thomas Ray, representing the Forfar Factory Workers, testified to the low moral tone of the half-time school, and its depressing effect upon other schools in the same building. He also showed that the system keeps down the rate of wages. For example, the wage for working one loom by girls in Forfar is 9s. per week, but four looms are worked for 18s. One woman does this work, assisted by a half-timer, whose wage is 2s. 6d. per week. The age for taking advantage of the half-time act originally placed at eight years, was subsequently raised to ten years, and is now to be raised to eleven.

A free Education bill for Ireland is a feature of the government programme for the forthcoming session of Parliament. It will be accompanied by a compulsory clause which will cause great excitement, as the Catholics will resist enforced attendance upon non-sectarian national schools.

A school for native girls of high rank is about to be opened in Siam, and three English ladies are appointed to take charge of it at salaries ranging from $1,500 to $3,500 a year. Opportunities have been pro-

vided for these ladies to study the Siamese language. This movement opens up an interesting prospect for the overcrowded ranks of English teachers.

The number of students entered this year at the twenty universities of Germany shows a very marked decline. The total is only 27,836 as compared with nearly 30,000 last summer. The decrease is generally distributed, except at Berlin, where the numbers have risen from 4,427 to 5,371, and at Halle, where they have risen from 1,493 to 1,522. Leipsic still holds the second place with 3,431 students, closely followed by Munich with 3,292. In the Prussian universities alone, about 3,900 are enrolled in the faculty of philosophy, and 3,000 in that of theology.

The Royal University of Ireland, has lately conferred a unique distinction upon two of the lady lecturers of Alexandra College, Dublin, by enrolling them as members of its examining body. Miss Mary Story, M. A., having been appointed assistant examiner in French, and Miss M. Kerr Johnston, M. A., assistant examiner in Physics.

With a view to the more rapid Russification of her Trans-caspian territories, the Russian government intends to establish in them Russo-native schools organized on the model of those already existing in Turkestan. At these schools pupils of either sex will be admitted, and the instruction will include besides Russian, the local dialects and Persian. The efforts for the Russification of Finland are vigorously pushed, and a thorough acquaintance with the Russian language is now essential to any Finlander who seeks service in the office of the secretary of state.

EMILE DE LAVELEYE.

The death of Dr. Emile de Laveleye, of Belgium, removes one of the most brilliant figures from the circle of foreign writers. His contributions to the *Contemporary Review* and the *Revue des Deux Mondes*, many of which relate to our own country, have familiarized a small company of American readers with the range of his powers and his lucid style. They can easily comprehend the influence at once positive and subtle, which he exercised upon contemporary thought in Belgium and France, can realize how powerful a leader has fallen at the moment when his country was looking intently for his direction in a political crisis. The revision of the Belgian Constitution proposed by the special legislative committee, strikes at cherished policies and introduces changes whose contemplation bewilders ordinary minds. Prudent men turned instinctively to the great expounder of the science of government whose vast knowledge, fine insight and dispassionate logic had so often guided

the counsels of his nation. All of these resources were brought to bea upon the new proposals which he analyzed one by one, in a series of articles that have formed for the last six weeks the most notable feature of the *Indépendance Belge*. His clear and forcible method of exposition was perhaps never more signally displayed than in these articles. Every opinion that he formulated was fortified by reference to historical precedent and by citations from recognized authorities. So far from diminishing his own quality, these quotations from kindred minds, served to emphasize the force of his own, while enriching his readers. It was in the midst of this work that he was stricken down with a brief, fatal sickness.

Dr. de Laveleye's latest and in many respects most important book was "Le Gouvernement dans la democratie." It is at once an exposition of the principles and forces in human nature from which popular government develops and a fascinating study of the gradual uprising and steadily increasing impetus of those forces in modern nations. One of its finest chapters is the seventh of the second volume, in which the author brings into graphic contrast the spirit with which Louis Phillippe in France resisted, and Leopold First in Belgium courted the party of the people, the one preparing unconsciously his own downfall; the other with paternal wisdom guiding his people into larger liberties. The interest with which M. de Laveleye followed political movements in this country, and his intimate knowledge of our past and current history are illustrated in his discussion of the Silver-bill, in the *Revue des Deux Mondes*, of March 15, 1891.

Although the science of government and the problems of political economy were his favorite themes, they by no means exhausted his powers. As a literary critic he was keen, profound and suggestive, while his letters from foreign countries reflected the large range of his sympathies and his quick and comprehensive perception. He was passionately fond of travel, and was welcome in every court of Europe. Kings and councillors were his intimates, yet humble friends felt the attraction of his simple, genuine affections. He died at the age of seventy, and in the full activity of all his powers. His funeral was conducted at Liége under the auspices of the university. He had held for a quarter of a century the chair of political economy in this institution of which he was the chief ornament.

A. T. S.

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned.

Administration of Justice in America, The. Wm. Roberts. *Fortnightly*, January. The writer had lived in California, and criticizes America from an Englishman's standpoint. "With vast resources, wherein lies the difficulty of having the laws administered and the service of the country faithfully carried out?" He complains that the officeholders are responsible only to those who elect them, and that the newspapers follow instead of leading public opinion.

Astronomy, The new. Robert Ball. *Fortnightly*, January. The telescopic and spectroscopic methods supplement each other. The spectroscope aids in the determination of the size, weight, and movement of the stars. It is the alliance of photography with spectroscopy that makes the present time so full of promise, as shown by the photographs of stellar spectra recently obtained by Professor Pickering and Mr. Lockyer.

Catholic Teaching, Saving our schools and their. Editorial. *Dublin Review*, January. "Non-Catholics are often puzzled by the importance which Catholics attach to having a Catholic school, and cannot see why we should not, like all sorts of Englishmen, be satisfied with well-managed Board Schools. They imagine that it consists in learning catechism and saying certain prayers: whereas, it is far more than this. Catholic Education means the regular training of the will and heart, upon the motives and principles set forth by the Catholic religion. In a Catholic school, the indirect teaching and training are quite as important as the direct. Pictures, crucifixes, and religious emblems, little devotional practices that occupy only a few seconds, as for instance, when the clock strikes, all help to create the formative influences to which we attach so much importance."

Cruelty to Children, Prevention of. Benjamin Waugh. *Dublin Rev.*, Jan. Since its formation in 1884, the society has dealt with 15,906 complaints, of which 10,179 were proved to be true. The cases have included the children of the drunkard, of the devil-may-care and idle; of the married and estranged; of the married and unfaithful, and the unmarried; of the dead; of tramp; of the gamblers; of the speculator in child-life insurance; of the advertising child slaughterers known as baby farmers; of the avaricious and greedy; and of the exceptional class which is cruel without any reason but that it has an implacable hatred of helplessness."

Döllinger, The Life and Writings of. "There was a gradual sundering in Döllinger's mind of what had once been a single individual conception. He came to perceive that in the historical evolution of the Christian Church there was a twofold development, that of the Christian Catholicism of early times and the great councils, and that of the Papacy, especially of later mediæval and modern times."

Domestic Decorations. Lady Colin Campbell. *National Review*, January. "Just as a bower-bird sallies forth from her nest and returns to it with any bright-colored sticks, straws, cowrie-shells, or glass buttons that chance or wandering civilization may cast in her way, with which she proceeds to adorn her house, so does the modern housewife collect in her room with equal aimlessness every conceivable and inconceivable thing which she can possibly classify under the head of 'ornament.'—The room should be in harmony with the character of the person who lives there. A woman's room should be her frame which completes and perfects the picture of her individuality."

Fiction, The Dangers of. Paul

Bourget. *New Review*, Jan. "While to the writers of the great classic traditions, the art of fiction is an occasion for images and emotions, it becomes to the analyst an occasion for ideas and reflections. Shakespeare and Molière are like watchmakers who make clocks to go and to show the time of day; the modern analytic novelist is a watchmaker who only makes his clock go in order to observe and exhibit the action upon one another of its wheels and its springs, and who, at need, would break it, the better to display its machinery."

Gravitation, the Mystery of. J. E. Gore. *National Review*, January. A history of the attempts to explain the difficulties in any theory of gravitation.

Henry VIII., The Revival of. F. H. Hill. *Contemporary*, Jan. This article was suggested by the production of this play at the Lyceum theatre in London. "Henry VIII. is interesting as being the epilogue of that great series of English historic plays, of which King John is the prologue, a series which taught Marlborough and Chatham all they knew of English history, and which Mr. Carlyle declares to be in essence and spirit the truest history of England ever written." The writer reviews the discussion as to the joint authorship of Shakespeare and John Fletcher, and thinks it not proven that Fletcher took part in it.

Intemperance, How it has been successfully combated. Janetta Rutland. *New Review*, January. Describes the success of coffee houses in England. "Some nourishment required as a substitute for the alcoholic stimulant. The working classes are glad to frequent coffee houses when managed on business principles."

Inter-Astral Communication. Camille Flammarion. *New Review*, Jan. A French woman has left 100,000f. for a prize to anyone who shall discover a means of communicating with a planet and of receiving an answer. The writer suggests that large buildings or mounds laid out in some regular geometrical form and then changed to some other form might prompt like answers from Mars, if there be any people there.

"Merry England." Duke of Marlborough. *New Review*, January. No other country will have so much influence on Anglo-Saxon development, as the U. S. American polity has been the outcome of the free play of English ideas of nation-building on a large scale. "The early English Covenanter who settled in New England had no clearer idea of his future mission to the English people than the gentleman-like spendthrift who betook himself to Virginia and there founded a slave-holding aristocracy, which went to pieces eventually under the pressure of popular opinion and jealousy from the North."

Mozart, An estimate of. F. J. Crowest. *Blackwood's*. Jan. "Mozart was the pioneer of form in music. The old system of enveloping the listener in a maze of bewildering musical ideas was boldly assailed, until now right-minded musicians make a study of form before launching their musical ideas and creations upon a critical public."

Nile Campaign, The Failure of the. Archibald Forbes. *Contemporary*, Jan. "There was a story at the time of the Dartmoor manœuvre, that the General-in-Chief, in the course of a rainy morning between breakfast and noon, changed his mind thirteen times in regard to the programme for the afternoon. This was, perhaps, the best on record of this species of mental activity, although Zululand furnishes some lively instances of similar evolutions."

Pitt, The Greatness of. T. E. Kebbel. *National Review*, January. Pitt is discussed under three heads: his principles, his policy, and his character. "Walpole, Pitt, and Peel represent the Oligarchical, the Monarchical, and the Democratic phases through which the party system has passed."

Pleasure. Herbert Maxwell. *Blackwood's*, January. "Proof of the enduring quality of the pleasure derived from knowledge of physical science may be had in the fact that no one is ever known to tire of it. Much of the pleasure of which we are conscious consists in memory, and hence, memory should be developed more than it is. For moralists to rail against pleasure is as irrational as it would be for physicians to warn people against sweetness."

Politics, The Elements of. Henry Sidgwick. *Edinburgh*, Jan. This work by the well-known writer on ethics is criticized as a "theory of politics

founded on reasoning which is mainly or purely deductive," and that he does not stick to that method, but "frequently resorts to his own opinions"; also, that "the book has been insensibly moulded by the state of legislation and thought in England at the present time."

Probability and Faith. Bishop of Carlyle. *Contemporary*, Jan. The writer describes Newman's writings as "a kind of phantasmagoria of thought, not corresponding to facts and conclusions which calm reflection enables an unbiased mind to accept as real." Probability must be and is in practice cheerfully accepted by us as our guide when certainty cannot be obtained. Education, temperament, experience and the like produce enormous differences in the estimates which different men make of probability."

Riding and Polo. Robert Weir and J. M. Brown. *Edinburgh*, Jan. "English horsemanship, though it unites to some extent a practical object with a limited amount of art, falls far behind that of ancient Greece. The horsemanship of the Greeks united the two essentials of grace and effectiveness. The Romans were less skilful and 'all round' horsemen. In the middle ages, in the riding of the military tournaments, horsemanship was, as it always is, influenced by the object for which it was chiefly used. In England, sport is a higher object than arms, but in France and Germany, the military spirit tends to impress on the horsemanship of the nation a military character."

Spanish Society. E. M. Clerke. *Dublin Rev.*, Jan. The literature of Spain is more national than that of any other country in Europe. There is no unity of thought between the Spanish people in Europe and in America. Their isolation, intensifying while narrowing the sympathies, gives Spanish literature a special value, as the most direct expression of national manners and thought. The battle between the champions of realism and idealism, begun in Spain about 1875, resulted in the decisive victory of the former."

Tsar Persecutor, The. E. B. Lanin. *Contemporary*, Jan. German farmers' settling in South Russia has resulted in the religious sect among the Russian peasantry of stundists, who meet at stated hours (Stunden). They all read and work. They resemble the early Methodists in their manners; their only religious authority is private interpretation of the Bible. Russian autocracy and orthodoxy have persecuted them severely.

J. P.

A GREAT WORK COMPLETED.

The appearance of the sixth and last volume of the Century Dictionary should be the occasion of rejoicing by all scholars and educators. It is a great credit to American scholarship. No one need use any more words or more difficult words because of this dictionary, but he may use his vocabulary with more correctness and precision. It need not be said to any of the readers of this magazine that the object of a large, full, complete and scholarly dictionary is not to aid any one to use high sounding words, or to increase the difficulty of understanding what the author has written, but its purpose is best served by aiding every author to use words with precision of meaning, and to make necessary discriminations between words more or less synonymous.

The completion of this great work marks an important era in American scholarship and book publishing. Its title is simple and short:—"The Century Dictionary." Its title page contains this short description:—"An Encyclopedic Lexicon of the English Language." On the title page also appears this statement:—"Prepared under the superintendence of William Dwight Whitney, Ph. LLD., . D., Professor of Comparative Philology and Sanskrit in Yale

University." Below this is the following:—"In Six Volumes. Volume VI." The only other words upon this large title page are the following:—"Published by the Century Company, New York." A more simple title page, in more tasteful lettering, can scarcely be found anywhere in the world. It is in striking contrast with the style of former times.

This work contains more than *seven thousand* pages of large quarto size. It embodies the latest, the broadest and the most exact knowledge in every department of human wisdom. No branch of science, art or literature has been overlooked. More than 6000 authors have been quoted in its pages. Scientific experts of the highest character and the most exact scholarship have been employed to prepare and to oversee the work in every one of the sciences and in all the departments of literature and philology. Space allowed for this article forbids the multiplying of quotations of words to show the fullness, the accuracy and the perspicuity which characterizes its every part. Such words as *town*, *vertebrata*, *vertical*, *vein*, *trichina* and *trichinosis*, *threshold*, *theory*, *tea*, *suspension*, are only examples of careful and extended treatment of individual words.

The great number and variety, the skill and accuracy, the taste and beauty of the illustrations are worthy of special mention. These cuts add immensely to the value of the work. It is to be hoped that the high schools of the country, both those in the larger cities and in the smaller towns, will be provided with copies of this dictionary by the school boards, and also that teachers, wherever the salary will warrant the outlay, will enrich their own lives by owning this valuable addition to any library.

No business or professional man who can spare the necessary money for its purchase can afford to be without it. Many a man who has it will earnestly affirm that were he without it he would deny himself of many a luxury for back or stomach, in order to supply so great a comfort for his home and his library.

All educators, all classes of our citizens, and in addition, and especially the editors and the publishers are to be congratulated on this important accession to the products of our American scholarship.

WILLIAM A. MOWRY.

Salem, Mass., Feb. 22.

AMONG THE BOOKS.

JOHN HANCOCK—EDUCATOR, is the title of a memoir of the late State Commissioner of Ohio, by W. H. Venable, LL. D. This book is a worthy memorial of Dr. Hancock. The author of "Beginnings of Literary Culture in the Ohio Valley" is fitted by native endowments, literary skill, by knowledge of, love for and companionship with his subject to give us a worthy tribute to one of Ohio's greatest and best educators. And he has done this. John Hancock appears in these pages as a strong, healthy boy thirsting for knowledge; as a firm, kindly, inspiring teacher; as an earnest patriot, a sympathetic friend and a devoted husband and father. At about eighteen he began teaching in a log schoolhouse. For forty-eight years he continued his work, moving steadily onward, upward till he entered and for an all too brief season filled the highest

educational position in Ohio. He died suddenly, June 1, 1891, with the harness on, and a great company mourns him. In these pages are notable tributes of affection and judicious selections from his writings. The longest is his admirable, compact, and uplifting lecture—"The Common Man." More than 600 copies of this work were subscribed for in advance of publication. Published by C. B. Ruggles & Co., 237 Vine Street, Cincinnati, O. Price, $1.25. N. B. All profits from sales of this book will go to Dr. Hancock's widow.

THE NEW WOMANHOOD is a bright, dignified, interesting book by James C. Fernald. The author, who evidently has a profound interest in the development of the noblest womanhood and a deep and genuine respect for woman as mother, wife, sister and daughter, makes a special effort to discuss his subject impartially and truthfully. The keynote of this book is in the thought that it is woman's solemn duty to do that for which she is best fitted, and can do best of all living creatures. This is woman's era. Within forty years the number of employments open to her have increased from seven to nearly 400. Man's attitude towards this whole discussion has changed wonderfully. Mr. Fernald is an index of the times. He sees the possibilities of a nobler womanhood and points the way. He treats in vigorous and direct fashion such problems of the hour as domestic duty, home development, work and wages, cooking, co-operation and education, marriage and divorce, study, hygiene, false and true ideals of life, reading, self-support, man and maternity, property, caste and culture, and other matters equally important and equally imperative. Marion Harland writes a generous, hopeful introduction. Here are forty-three brief chapters full of stirring fact, kindly suggestion and earnest purpose. It will act as a tonic on the reader. It will open some blind eyes to the possibilities of our coming womanhood. Published by D. Lothrop Company, Boston.

Professor Brainerd G. Smith, of Cornell University, has prepared a most helpful and timely book entitled READING AND SPEAKING, being familiar talks to young men who would speak well in public. The work is designed as a text-book for colleges and higher schools, and also for general use. Professor Smith treats of control of the breath, and gives some excellent rules for developing lung power and curing defects in utterance; good articulation and a natural manner; vocal inflections; rhetorical powers; sentences and their delivery; gesture; physical earnestness; etc. The suggestions he gives he has used in his class-room and he gives them with the fullest confidence in their worth and practical value. There are no learned dissertations on the value of speaking, no theories on this or that method; he has something to tell to those who would speak in public and he says this something in the most succinct yet forceful manner. Every public speaker, from a Depew down to a ward caucus politician, should study this book and learn its rules. It is one of the best treatises on this subject and is destined to be extensively used. D. C. Heath & Co., Publishers.

Geologists have told us much about the earth on which we live. And not a few have added to our knowledge of North America. But we venture to say that never has THE STORY OF OUR CONTINENT been told in such an interesting and instructive way as by N. S. Shaler, the learned Professor of Geology in Harvard College. In simple, felicitous language he explains how our continent

has come to its present physical state and how this affects the life of the people. We fully agree with State Agent George H. Martin who says: "The book is thus admirably adapted as a reading-book to round out the grammar school course on geography and history. At the same time it gives just enough knowledge of geology and biology to whet the appetite of thoughtful boys and girls for scientific study." A careful perusal of this book will freshen and increase any teacher's knowledge of the subjects treated. Try it. Published by Ginn & Co., Boston.

To Ginn's College series of Greek Authors has been added the PROMETHEUS BOUND of Aeschylus, translated from Wecklein's edition by Professor F. D. Allen of Harvard University. The translator has made but few changes in the text and commentary as originally prepared by Rector Wecklein. The notes are on the same page with the text and consist chiefly of explanations of cases of irregular metre, and of disputed readings with numerous cross references. The type is large and clear.

Professor E. Miller, of the Uuiversity of Kansas, has prepared a treatise on PLANE AND SPHERICAL Trigonometry, which with its appendix comprises only 114 pages. Throughout the work the theory of the science is based upon the analytic method, and any practical formula is illustrated by examples of numerical computation. A great numberof examples follow nearly every demonstration and these problems are of the most practical nature and make the student the real compiler of his text-book. The treatise is one of the best on this subject. Leach, Shewell, & Sanborn, Boston, are the publishers.

It was a clever inspiration of the editors of the International and Modern Language Series to issue works in their original text. It is their purpose to present a series of specimens of the literature from the present time back to the earliest stages of the language. The first issue in the series is a pamphlet of twenty-six pages and is Montaigne's DE L' INSTITUTION DES ENFANS. The text is the original one of 1580. The editors of the International Series are Professors Bôcher and Van Daell. Published by Ginn & Co.

CONTES DE FEES contains eight classic fairy tales designed for beginners in French. These tales are edited with notes and a vocabulary by Professor Edward S. Joynes, of South Carolina College. The stories are, Little Red Riding Hood, Blue Beard, Puss in Boots, Cinderella, Hop O' my Thumb, Pretty Goldilocks, Beauty and the Beast, and Prince Darling. These stories will be read with keen delight by all students of French and their publication in so convenient a form is to be highly commended. D. C. Heath & Co., Publishers.

COLLEGE REQUIREMENTS IN ALGEBRA, A final review, by George P. Tibbetts, instructor in mathematics, Williston Seminary, (Ginn & Co.), is the title of a collection of college papers illustrating nearly every principal in Algebra. There are abont four hundred examples and they are arranged by subject. The author has used these reviews in preparing students for college and confidently believes that college candidates may be assured of entering if they perform all the examples without aid. We see no reason why answers to the problems should not have been given.

A respectful consideration is given by teachers to any new method of presenting a subject to pupils, and the authors of Heath's STUDIES IN AMERICAN HISTORY have made a revolution in their method of teaching history. The burden of the work is thrown directly upon the student, and this work is one of investigation. In using this history the student becomes, not a passive reader, not a memorizer of unconnected facts, but a searcher for facts, and an active agent in arranging and collating these facts. By this method, thought-power is developed, and the real meaning of history is comprehended. The pupil becomes a student rather than a reader of history. The authors, Mary Sheldon Barnes and Earl Barnes, have made a text-book which teachers of history have long waited for, and will most royally welcome. They have brought to their aid every help that will serve in the hands of the pupil, and the wealth of illustrations, excerpts, references, maps, etc., is beyond that offered by any other school history. The language of the text is clear, simple, and a model of good English. "The book," as one says of it, "will make thinkers and talkers instead of memorizers and repeaters."

It is fifteen years since Prof. W. D. Whitney issued his Essentials of English Grammar and the work has stood the test of time as a reliable, scholarly, complete text-book on English for schools. The changes in studying grammar brought about during the past few years have called for a remodelling of text-books, and to meet the demand Professor Whitney has associated with himself as collaborateur Mrs. Sara E. H. Lockwood, author of "Lessons in English," and an adaptation of the Essentials have been made and brought out under the title of AN ENGLISH GRAMMAR. The work is designed for use in the higher grades in grammar schools. The main features of the Essentials have been retained and much has been added which will make the book welcome to teachers who believe that the English language is not a grammarless one and that its parts and construction should be thoroughly studied by those who would aim to speak and write intelligently and correctly. The new work is a grammar, a treatise on the structure of the sentence, and is supplied with abundant exercises to illustrate any subject considered. Published by Ginn & Co.

The current number of THE SALEM HISTORICAL AND GENEALOGICAL RECORD has an article by Robert S. Rantoul on "Simon Bradstreet's Tomb" which deserves to be widely read.

The March number of the MAGAZINE OF ART has a colored frontispiece, a decorative panel, "Autumn Twilight," by Albert Lynch, an artist whose work, through the medium of the press, has achieved an equal popularity with the art-public in France, America and England.

THE PHILOSOPHICAL REVIEW made its first appearance in January and goes to the front in a strong, earnest way. It is guided by one of the most incisive and philosophical of American scholars, Professor J.G. Schurman, Dean of the Sage School of Philosophy in Cornell University. It will be published bi-monthly. The first number contains valuable articles by Professor George T. Ladd on Psychology as a Natural Science; Professor John Watson on The Critical Philosophy and Idealism and by Professor Ives Gilman on Some Psychological Aspects of the Chinese Musical System.

Mr. Dugald McKillop has prepared a most timely book under the title of SHORTHAND AND TYPEWRITING, (Fowler and Wells, New York), in which he gives a history of shorthand, directions for learning the art, and suggestions to the amanuensis. There is also a full description of the various kinds of reporting and of typewriting in all its details. Mr. McKillop gives most excellent advice not only to learners but to those long at the service and speaks as one well qualified to give instruction. Many fine illustrations of the leading machines and other appliances used in connection with typewriting work embellish the work. Shorthand writers and typewriters will find much in this book which will be of valuable service to them in their work. The price is 40 cents.

"Cæsar is a word that conjures up nightmares of a soulless, dog-eared text-book, with a prolixity of subjunctives and butchery." To enter upon the study of Latin through the DE BELLO GALLICO is for the beginner to start upon a journey with its greatest difficulties set him to overcome at its very commencement. Clearing away these obstructions has now become the fashion with text-book makers and we have recently noticed in these pages several books prepared for students just beginning to read Cæsar. The latest noticed was Dr. Collar's Gate to Cæsar, and we now have what is called A STRAIGHT ROAD TO CÆSAR, for beginners in Latin, by George W. Waite, Superintendent Oberlin Schools, and George H. White, Principal Oberlin College Preparatory School. The aim of the book is shown by its title. The plan followed by the authors includes, among other features, an abundance of easy Latin and English sentences for translation; the use of Cæsar's vocabulary and of sentences taken from Cæsar; provisions for most thorough drill on paradigms; adequate means for teaching pronunciation from the beginning; and the employment of the inductive method. Every rule of the grammar is touched up, the grammar being quoted to illustrate the sentences. The work progresses slowly at first and it would appear that there were a superabundance of exercises, but the authors claim that they have found by repeated trials that classes will accomplish the book and a large portion of the first book of Cæsar in thirty-six weeks. There are no difficulties which the authors have not anticipated and smoothed away and the path they have made is certainly a straight and comparatively easy and comfortable way to Cæsar. We strongly commend the book to the notice of teachers of Latin. Published by Ginn & Co.

"The Story of Massachusetts" has been contributed by Dr. Edward Everett Hale to the series, the Story of the States, which D. Lothrop Company are issuing under the editorial supervision of Elbridge S. Brooks. Dr. Hale selects from the nearly three centuries of Massachusetts' history, twenty-one occasions of critical interest, crystallizing each into a chapter and showing the connection that exists between these selected events. A prefatory chapter on "the Bay State" puts into chronological order the history of two hundred and seventy years, so that one may study its record in brief before turning to a perusal of the story in detail as given in the twenty-one selected epochs that follow. These epochs deal with the Pilgrims and the Puritans at Plymouth and Boston; with the environs of Boston; with such disturbing elements as Mistress Anne Hutchinson and "the people called Quakers"; with the Salem Witchcraft, the old Indian troubles, the French and Indian Wars and the tyrannical Sir Edmund Andros, the capture of Louisburg and the fall of Canada; with the Boston Massacre, Lexington and Concord and Bunker Hill; with the record of

Massachusetts' old-time industries and commerce; with her record on the sea in peace and war; with the discontent that showed itself in Shay's Rebellion; with her stand in 1812 and in the Civil War, and with her steady development in material prosperity as a great producing and manufacturing state. Dr. Hale seizes the salient points in Massachusetts' story, dresses them in entertaining narrative and presses them upon his readers with that force and vigor which we naturally expect from the author of "The Man without a Country" and "In His Name."

Less than a half decade ago a knowledge of the principles underlying political economy, even a knowledge of the general facts that go to make up the science of political economy was known only by students in colleges and by specialists who guarded their wisdom as they would a choice treasure. They doled out their facts and philosophic reflections with a superior air and the monopoly was a close one. But a change came over the minds of men and they would know about wealth and value, production, and consumption, labor and capital, free and protected trade, and the "trust" was broken. The first calls were for primers on political enonomy, and the alphabet of the science was learned, then easy sentences were read, and finally men of all grades came to think and write in the terms of the science. Primers are now no longer needed, the demand is for treatises which shall encompass the entire question. This country has probably produced as many popular treatises on this subject as have other countries, and the influence of these is felt all over our land. Contributions to the literature of political economy are yearly made, and these contain the newest thought and theories on the subject. One of the recent publications is a translation into English of Prof. Charles Gide's PRINCIPLES OF POLITICAL ECONOMY. Mr. Gide is Professor of Political Economy in the University of Montpellier, France, and has an established reputation as a thinker and writer on social and economic subjects. The book which he has prepared is neither a primer for beginners, nor a dissertation for the learned, but a guide-book for serious students who have mastered the economical alphabet, and are feeling their way to a judgment of their own on economical subjects. The various subjects commonly considered in handbooks on political economy are in their turn discussed with a freshness of thought, a fullness of illustration, and a cogency of reasoning that make the book a notable one, and inviting alike to the general reader and the close student. Viewing the question from the standpoint of a Frenchman, there are sidelights thrown on which illustrate many hazy spots in the science. All parts of the book are interesting, but probably the best reading will be found in Book II. which treats of Production, with its individual and social conditions, and the equilibrium between production and consumption. Under these heads the question of monometallism and bimetallism is carefully considered, and those who are at present bewildered over the "silver question" now so prominent as a political factor in this country, will find a lucid exposition of the entire question. Free trade and protection are discussed, and the arguments for and against both sides are given in a succinct yet a comprehensive manner. Professor Gide's book will repay careful study; it comes a welcome addition to the literature of the subject and it merits a place on the library shelf of every one interested in the social and economic questions of the day. D. C. Heath & Co., are the publishers.

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

VOL. XII. APRIL, 1892. No. 8.

THE SCHOOLMASTER AND UNIVERSITY REFORM.

ETHELBERT D. WARFIELD, LL. D., PRESIDENT OF LAFAYETTE COLLEGE.

AMONG great teachers, few are more deserving of honor than Friedrich August Wolf. "It was he," says the late Mark Pattison, "who created, and who himself gave the first example of, that enthusiasm for philogical studies, which for sixty years — two generations — has been the quickening life of German education. * * * Equally removed from the grammatical pedantry of the old schoolmaster and the superficial Schöngeisterei of the French Lyceum, Wolf, at once accurate and genial, struck a new and original path." And he then quotes Wolf as follows: "If we wish to raise the universities from their present torpor, we must begin by raising the schools. The only way of raising the schools is to send them better-prepared schoolmasters. School reform means schoolmaster reform. When the masters are better able to teach, the scholars will come better prepared to the university."

I have ever been ready to accept Wolf as one of my masters, and in nothing does he seem more worthy to be followed than in the dictum just quoted. It is all very well for the university and the college to plot and plan, but they reckon without their host if they cannot command the support of schoolmasters and cannot inspire them with their own spirit of progress and reform. The relation is not one of causation, but of condition. The university and the college are conditioned by the preparatory school. The relation, indeed, is one of interaction of causes, but in this genera-

tion, when free *will* is so closely connected with free *wont*, the college must be careful to commend every step which it takes, not merely to the people, but specifically to the masters of schools. Of course, I am not playing the part of a discoverer in making this statement. I am sure that every schoolmaster has long since come to a very full appreciation of this condition of things. Indeed, it is very much better appreciated and understood in the school than it is in the college. There was a time when the college spoke with authority and when the masters of our schools, graduates themselves of this or that institution, gladly harkened unto the voice of their *alma mater;* and when the college said: "Come up higher," the schoolmaster said: "Yea, gladly." And when the schoolmaster said: "Reach out more broadly," he took it back with equal alacrity, if his venerable mother frowned but the least bit. But now that our schoolmasters are so many and so mighty in the land, and of so many antecedents, or in some cases it may perchance be of so few, and no man can tell any more than he can of the wind which bloweth whither it listeth, whence they have come, or whither they will go; it is a fortunate circumstance that associations of heads of colleges and of schools have taken in hand the great problem of giving a purpose, especially to our secondary education, and no one hails the results with greater delight than I.

Since the school conditions the college, and the schoolmaster is an invariable factor in every problem which the college has to solve, it is especially desirable that the school and the schoolmaster should be represented as a known quantity. We hear a great deal of talk at present of a good time coming, when the school and the college and the professional school shall be fitted together with perfect and unjarring symmetry; when the school will teach neither too little nor too much as a preparation for college, and the student will pass from the one to the other without consciousness of a hiatus in his training. It is sometimes a little puzzling to determine which preparation has the worse influence on a college student — the inferior or the excessive. I am sometimes tempted to believe that the average boy is better off with one "condition," than he is if one term in advance of his class. While human nature is human nature, some schoolmasters, in their over-anxiety to win repute by the excellence of the entrance examinations passed by their students, will overreach themselves

by throwing the temptation of a term of loafing in the way of students and so will lose the initial good by the decline of the student's work. Then, too, one schoolmaster complains that his boys are not doing well because the standard is too low, when at the very same time there will be a dozen others complaining that their boys were conditioned and that the standard is too high. How to strike the mean between these two extremes is sometimes difficult to determine. The friction occasioned by it is always unfortunate, and it is hardly possible to entirely eliminate it. Ambitious principals in prosperous and wealthy schools will push their standard proportionately to the elevation of the college admission; while equally good teachers, handicapped by want of means and want of good material, are inevitably forced to drag behind. Now there are three or four problems which are burning questions in the educational world, and their ultimate solution rests not a little in the hands of the schoolmasters.

In the first place, the conflict between the numerical and the intellectual standards is one of the great perils of the period. What is to become of higher education if numbers are to be the criterion of excellence? This unfortunate condition of affairs which is to be found so widely to-day, is one of the conditioning influences in the problem of the standard of admission. A great number of students slip out of school and into college long before they are ready for college, simply because the faculties lack the courage to refuse any reasonably satisfactory application. Now and again we find that boys have left their schools against their principals' desire, and the schoolmaster is naturally disgusted with the college that accepts them. They are dropped at the end of the freshman year. Dropped, not back into school where they should have stayed for another year, but into some other college deceived by the same desire for numbers, or into the world with the disadvantage of an incomplete preparation for life. Just here we seriously need a distinct and definite understanding with schools which shall be positive and negative; the college accepting the school certificate on the one hand, and declining the student without the school certificate on the other. Reciprocity is the only condition of reciprocal confidence and success.

On the other hand, when it comes to a question of raising, either actually or nominally, the standard either in school or in college, there should be coöperation. If the school wishes to raise

its standard, let it communicate with the colleges to which it sends its students, and endeavor to secure a corresponding change. And if the college wishes to effect a similar change, let it pursue a similar course. Of course, if the school suffering from the same disease of an over-desire for numbers is seeking by its change to bring about a discrimination against neighboring schools on the plea of inferior instruction, mutuality becomes impossible. But why should we not have coöperation and coördination? Surely, there is room enough and to spare for all, and the evils of competition seem to me incalculable.

One of the difficulties in the raising of the standards is the opposition of those schools which lack proper facilities to make the change. Even if schools so situated were unselfish enough to forgive the injury thus unintentionally caused, it takes quite a while for their students to get in line with their classes, thus injuring the classes to which they are received under condition. Either way there is confusion. How to prevent such a contingency it is somewhat difficult to determine. And this leads me to suggest that the college may well take care how it proceeds along the line of indefinite elevation of its standards of admission.

The recent movement for the shortening of the course has always seemed to me to be a sort of backing water rendered necessary by standards of admission fixed some time in the past. Not that I mean to say that I think the highest existing admission requirements are too high, but I do think them too difficult, not by any means synonymous expressions, as may be seen where laboratory work is demanded, for which few schools are equipped. The school must keep in view the idea "that it is not a knowledge but a discipline that is required; not science, but a scientific habit; not erudition, but scholarship." Of course, a first class man, no matter what the position he occupies, filled with the desire to do the best work, is constantly pressed on and scarcely resists the temptation to extend the field of his school beyond that of mere drill. But the man who yields to the temptation is likely to meet with the same results as the little boy who digs up the seeds in his garden to see whether they are growing or not. One of the most frequent injuries to the very best of boys is to force them into too early efflorescence. The over-mature schoolboy is apt to turn out the under-developed man. I have always thought that the course should be shortened, not by a reduction to

three years in college, but by an earlier introduction and a more steady devotion to the essential elements of a sound education. No boy, as it seems to me, should enter the freshman class later than seventeen. The majority should do it at sixteen. I am afraid this will be deemed heretical. I was early prepared for college myself, and I have seen great numbers of boys so prepared without any crowding or any injury to their health or to their mental development. I do not believe that the young child is any more hurt by being taught to think early, than the young horse is hurt by being taught to trot early, or the pointer dog to point. Thought is the proper function of the human brain, and it is rather a question as to the duration than as to the seriousness of its action, and I am quite sure that I learned more Latin between the ages of ten and twelve than I should have learned between the ages of fourteen and sixteen, had my Latin been untouched till then, and that with less effort. And moreover, when the students come to college, coming as they do from a great variety of homes and schools, they need to be unified by at least one year of additional disciplinary instruction. But what can we do if the schoolmaster does not accept our view. The German theory is the early introduction to the staples of education, but the German gymnasium undertakes to complete the disciplinary portion of the child's education. We have already accomplished sufficient evil results by our ill-considered adoption of German methods. While I yield to no one in my admiration of German scholarship, I do not believe that German scholars are the highest product of nineteenth century civilization. There is not enough of the mind with a broad outlook upon the world, with a large capacity for action and an infinite degree of self-confidence such as we find in our own college-bred men, and let me say very plainly that, *me judice*, the aim of our colleges is not to make scholars in the German sense at all, but to make men. Our colleges are intended to prepare men to become scholars, whether as teachers, as ministers, as lawyers, as doctors, or as engineers. But the average college graduate at best has only a few scholarly instincts whatever he may think he possesses.

And lastly, let me say a word as to the differentiation of courses. Emerson says that "every promise of the soul has innumerable fulfillments." The schoolmaster's duty is to let the soul find its own development, and then to help the boy to choose the highest

fulfillment. Preconceived ideas on the part of schoolmasters in regard to what is and what is not necessary, are exceedingly injurious to the young, and offer untold difficulties to colleges when a mature judgment begins to correct the unfortunate influence of an early teacher. Emerson says, once more; "A man is a method, a progressive arrangement, a selecting principle gathering his like to him. Wherever he goes he takes only his own out of the multiplicity that sweeps and circles round him. He is like one of those booms which are sent out from the shore on rivers to catch driftwood, or like the loadstone among splinters of steel." I should rather liken a man to a boy's pocket, being constantly filled up with all sorts of odds and ends and undergoing periodic disgorgings and gradually settling down to a residuum of the more valuable, the basis of selection being progressive with the development of taste and judgment. Or, to a whirlpool in the river, which is constantly drawing in all sorts of material, but retaining only that which is most weighty and sinks deepest. So the boy sees no use for Greek, and he wakes up some day and finds himself called to God's ministry; or he sees no use in mathematics and later develops a taste for physical science; or he sees no use in composition and finds in after life that he is called on to represent in public, by tongue or pen, some great cause. The schoolmaster's duty to the college, of course, is measured by the preparation demanded by any one of the courses which it offers, but it has always seemed to me that the duty of every teacher was to lay the foundation as broadly as human nature, and as deeply as the individual nature of the boy admits of.

CURRENT METHODS IN BOTANICAL INSTRUCTION.

CONWAY MACMILLAN,

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IN the inaugural address delivered before the Association of Economic Entomologists, last August, Mr. James Fletcher of Montreal, the president-elect, somewhat ruefully directs attention to the fact that while botanists, geologists, and chemists meet with a degree of popular respect, the entomologist is not infrequently an object of vulgar and ignorant derision.

The explanation is readily offered; for the botanist is from time immemorial, connected in the mind of the layman with herbs and the healing art; the chemist still lingers in the awesome penumbra of middle-age astrology; the geologist suggests an enchanting vision of gold-mines, gems, and stores of hidden treasure, but the particular economic relations of the entomologist being of newer growth are recognized the least. It will scarcely be wise, however, for the student of plants in these modern days to congratulate himself overmuch upon such an alliance with the art of medicine. It is a union that, in the past, may have been fertile with great good both for medical and botanical science, but it is certain that the conception of the botanist as an herbalist lies near the bottom of that dreadful inertia which characterizes botanical instruction in the United States, and to a less degree in Great Britain and on the Continent. Against the petrified wall of prejudice in favor of dignifying herbalism with the name of botany, it is hopeless to dash one's head. Only by the gradual downward infiltration of better, truer method from the few real centers of botanical activity and progress can the lump of American high-schools, academies, and colleges be leavened.

Let us notice first of all what, in general, is the condition of botanical instruction-methods in the United States, and later an attempt may be made to explain how such methods chanced to originate and engraft themselves with such tremendous vitality upon educational institutions otherwise in the line of modern scientific progress. In truth there are in America points of high scientific vantage-ground where thought along lines botanical is active, where broad minded ability has planned and executed laboratories, libraries, courses of study, methods of research and communication which may well invite comparison with anything being done in similar fields either in Germany or in France. Harvard, Wisconsin, Purdue, Nebraska, St. Louis, are a few of the names which suggest themselves in this connection. With masters of their subject such as Goodale, Farlow, Barnes, Arthur, Bessey, Trelease, these and other institutions have done much to teach the true implication of botany, and are to-day bringing to bear great influence for improvement upon the thousand other institutions of less opportunity and more sluggish growth in scientific grace. In these few universities which come by right in the first class — so far at least as concerns the teaching of botany

— there is uniformly present that necessary point of view emphasized before in the pages of EDUCATION. Plants are held for living things and are studied for their own sake — not as mere curious puzzles for the systematist. Physiology, embryology, geographical distribution, anatomy, morphology, all have their places in the curriculum, and the student who is fortunate enough to receive instruction under these favoring circumstances does not fail of learning somewhat of the ways and origin of vegetable creatures. Large names pass for little, small plants for much, at such a university. Systematic botany is not neglected, it is comprehended. It needs but a cursory reading of an address such as that of Dr. J. M. Coulter, President of the University of Indiana, before the section of biology at the Washington meeting of the American Association for the Advancement of Science to perceive distinctly the vast difference which exists between a true systematic botany, and that dismal petal-pulling calisthenic which passes for it in the majority of American institutions of learning. Systematic botany is comprehended at the institutions of the first-class for it is presented not as the A. B. C. of the science, but as the laborious after-task which should be undertaken only by the student whose intellectual grasp has been broadened and strengthened by an intimate knowledge of the facts of morphology, embryology, and anatomy — who has learned by experience something of the fundamental rules of determining kinship between the species, genera, families, orders and classes of living plants. Throughout, the laboratory-method is employed. Verification of statements, comparison of results, generalization and original investigation is insisted upon and the student terminates his studies, if need be, humbly as a student should, and not arrogantly, as a finished botanist because, perchance, he has learned how to analyze a flower and has thus scaled the Mont Blanc of all plant science. Not only, therefore, in these few institutions, is some knowledge given of the plant-world, but also the habit of scientific thought is developed so that the student who completes his course, goes into the world with openness and sympathy and breadth of mind, — not burdened to intellectual extinction with the narrowness of unconscious ignorance.

But when one remembers that, of the tens of thousands of students who yearly pass from the schoolhouse door to the duties of a citizen's life, there are but a few hundred at best who have ever

had the opportunity of meeting plants under these favoring conditions of introduction which have been described, it is important to know what is the manner of botanical instruction in the colleges, academies, seminaries, graded schools and high schools of the nation. Certainly it is not bad in all. The writer knows of plain district schools where the children are taught wisely and well about the leaves and roots and mosses and puff-balls which may be gathered beside the schoolhouse steps, but it is doubtful whether the number of such modest schools equals that of the colleges, real and so-called, where discouraging orthographical, linguistic, and etymological atrocities are calmly perpetrated under the name of botany. The bright spots become radiant from their very scarcity. They exist and like truth itself are tiny lamps almost extinguished by the encircling gloom. Perhaps a description, not overdrawn, of a botanical recitation from the Darkest Africa of a fairly typical summer school for teachers may not be altogether out of place as an illustration of what passes for botany all over these broad United States. It is unimportant to locate definitely this recitation either in space or in time. Doubtless it will be recognized all the way from Maine to California.

(Teacher.) "We will now pass to the recitation in botany. Those not in the class may withdraw for study."

(Assistant with the bell.) "Ting-ting-ting!" (An acute majority withdraw.)

(Teacher.) "We have now to discuss the subject of cotyledons. What are the primitive seed-leaves called? All together now!"

(Class.) "Cotyledons."

(Teacher.) "Right! The cotyledon is the primitive seed-leaf. If there is only one what is the plant called? All together again!"

(Part of the class.) "Monocotyledonous." (Some on the back seats.) "Polycotyledonous," "Polycoletedonous," "Mollycoddledonous," etc.

(Teacher.) "Monocotyledonous is correct. Miss Smith, can you explain the derivation of the word?"

(Miss Smith.) "It is from the Greek and means one-cotyledoned."

(Teacher.) "But if there are two cotyledons what is the plant called?"

(Miss Smith.) "Dicotyledonous, meaning two-cotyledoned."

(Teacher.) "Also from the Greek?"

(Miss Smith.) "Yes, sir."

(Teacher.) "Very good: that is sufficient. Miss Jones! If there are more than two cotyledons what is the plant called?"

(Miss Jones.) "Dicotyledonous."

(Teacher.) "No, that is where there are two cotyledons."

(Miss Jones.) "Oh! Polycoletedonous."

(Teacher.) "Not polycoletedonous, but *polycotyledonous* — it *is* a pretty long word."

(Miss Jones.) "I meant polycotyledonous."

(And so on for three-quarters of an hour.)

How it is possible with the world full of living plants that they should be neglected for word-worries of which the above is a fair example, would be difficult to understand did we not fix our attention upon the fact that botany as such has but recently enjoyed an independant existence in America. It is but lately that it has differentiated itself from pharmaceutical herbalism, and it bears the marks of its serfdom yet. Ready diagnosis between the useful, the indifferent and the harmful herbs was essential to the gatherer of roots for medicinal purposes. From this necessity arose the various "systems of plants" so-called, of which the one of Linnaeus is perhaps the most noted example. The first botanist, Aristotle, was, as in other things, far ahead of his age in his attitude toward the plant-world. He did not consider plants so exclusively from the point of view of the herbalist as did his follower, Dioscorides — to whom Sprengel, and later Gray in England and Greene in California, have referred many of the Linnaean genera. The diagnosis so important to the herbalist is of no particular importance to the botanist. A man might be an excellent botanist without knowing one plant-name from another. Nomenclatures and diagnoses are purely social and economic in their bearings; they do not constitute the heart of the science as so many seem to suppose. The firm hold of herbalism upon American schools to the exclusion of botany is evidenced by the manner of instruction in most of the institutions excluded from the first-class. The whole course in "botany" is planned that, at its close, the pupil may practice a few diagnoses, may apply a few binomial names and may gather a collection of pressed flowers which are pasted carefully in a synopsis-book — such as certain

misguided persons have been unable to refrain from publishing — and the whole unfortunate affair is dignified as an herbarium and is afterwards filed away upon some garret-shelf, while its owner does not scruple, when questioned, to admit that he has "had botany." And he does not think very highly of it either.

In presenting such a course as this some text-book is necessary, from the pages of which the pupil may memorize the names which he must employ in future diagnoses. In most cases a glossary of terms is selected which is quite without orderly arrangement, but making a great show of system. The text-book-glossary is condensed to the limit of comprehensibility in order that it may include all needed polysyllables for the approaching hour of trial when a flower is to be analyzed. Consequently the pupil is assured that ovules are campylotropous, anatropous, amphitropous, but nowhere is he given the slightest insight into the true nature of an ovule. He will be convinced that the leaf is orbicular, oblanceolate, spatulate, palmately pentafid, but he will not have the slightest intimation of how it came to be so or why it is so. All this is certainly very important for herbalism, but it is the antipodes of botany. At the end of the text-book is generally bound a list of plants, particularly of the flowering variety, belonging to an unnatural and limited area of country, diagnosed briefly and imperfectly, devoid of historical, anatomical, physiological, geographical detail, burdened with antique unscientific and well-nigh forgotten nomenclature, arranged in a deceptive and exploded order, free from any hint of uncertainty or question — all synonymy, citation, and discussion being masterfully suppressed,— breathing forth an indescribable *excathedra* air of completeness and ultimate authority calculated to deceive the very elect, indexed with care in type illegibly minute and prefaced with an "artificial key" which emphasizes everything unimportant (because it happens to be diagnostic), and passes in silence everything important — and the whole indiscrimate, misleading, unnecessary bundle of ink and paper is called a "Handbook of Central American *Botany*" or something of that kind, and people believe that this sort of thing really *is* botany.

In all this the influence of herbalism and pharmacy is of course apparent. By popular consent "botany" is the science of knowing the names of plants; a "text-book of botany" is a glossary of floral terminology; a "manual of botany" is a diagnostic list

of flowering-plants; a "botanist" is an individual who depredates about in wood and meadow, with a tin candle-box slung over his shoulder and an air of always being on the *qui vive*. With such almost universal misconception it is no wonder that a few scientific botanists seek to abandon their right name forever and call themselves "phytologists" or "plant-biologists." The sensible majority, however, cannot follow the zoölogists in this will-o'the-wisp chase after new and high-sounding names, but prefer to bring yet more honor about the name they have borne so long and time has already honored. While botanists may smile at the intellectually insular conceit which rechristens zoölogy, "biology"— as if animals were the only living things — and this is a practice which obtains at institutions reputable otherwise, they cannot but sympathize with the scientific zoölogist who finds his calling popularly confused with species-mongering and butterfly-stalking and, shamed by his very name, seeks some new appellation to which he may impart a broader meaning.

Herbalism then, while, as Fletcher indicated, it may enhance the herb-gatherer and the botanist in the eyes of the throng who are pleased to call themselves practical, is after all the bane of modern, American, botanical instruction. To it is due the hopelessly erroneous conception of the plant-world which is year after year offered to the young of our nation. To it alone is due the almost universal belief that botany is a science of diagnoses, of herb-gathering, of petal-pulling, of herbarium-making.

To what herbalism as it has triumphed in American botany may be ascribed is not a difficult matter to determine. Ever since the close of the last century when Walter and Marsh were publishing their lists of American plants, the herbalists have been in the saddle. This is partly the result of necessity since England has always, under the influence of the Kew botanic gardens, tended strongly towards the herbalist conception while the nations of the continent have developed the chemico-physical conceptions, and America has derived most of her educational machinery from England. It is also in part the result of accident. Men like Pursh, Nuttall, and Torrey — able and brilliant in their specialties have trained botanical students, expended botanical endowments and dominated botanical thought in America. To the great genius, transcendent executive ability and liberal popular support of a few specialists, the country at large owes its failure to become *en*

rapport with botanical science at the high-water mark such as has been reached at Berlin, Leipzig, Würzburg, Paris, Vienna, Amsterdam, and Marburg. For many years Professor Draper of New York City, was almost the only man in America who stood forth preëminently as capable of receiving the message of botany in its modern sense. It is impossible to speak of this remarkable man with too great respect. He preserved toward the plant world the attitude of an investigator and considered plants as living creatures worthy of careful study, while his coevals were all deep in the mire of species-making and herbarium-prowling. Draper was far in advance of his generation and his work grows brighter and appears more gigantic as the years go on.

To other and to younger men was the task allotted of delivering botanical science from its long bondage as the slave of medicine. But not all of this younger generation struck off the chains. Some — and not the less brilliant men — strove to rivet them the tighter. It is principally due to Charles Bessey that the methods of instruction in botany have improved so greatly — especially in the western universities — in America. Bessey early came under the influence of the great German originators of our modern views botanical and resolved to bring to American students something of the inspiration and freshness which breathes in the pages of Hofmeister, Dr. Bary, and Sachs. With such a purpose, and avowedly a disciple of these masters, he brought out his series of text-books, and for the first time put before American students a connected, logical, scientific, and adequate view of the vegetable kingdom. For the first time ideas of anatomy, morphology, homologies, relationships, together with the message of physiology were put within the reach of the average American pupil, in a wisely ordered and attractive form. It is not far from fifteen years since this was accomplished, and the last ten years have been the most productive in botanical science that America has ever known. Perhaps there may not be the giants in stature that the past has borne upon its bosom; but there have developed throughout the length and breadth of the nation hundreds of patient observers striving in the spirit of Darwin to contribute each his store of truth to the great temple which mankind calls knowledge. To no other one man of our country has this been due so much as it has to Bessey.

We may well believe then that in spite of the dense Philistin-

ism which oppresses so much of American botanical method and instruction, there is a day of greater improvement not far in the future. When that day has come we shall see the end of the herbalist-regime. Botany will be yet more emancipated from the realm of the so-called "practical" which is the realm of the exhausted and sterile, and will be free to take its place, by universal consent, with its kindred sciences,—geology, chemistry, physics,—in the purer region where there remains something of potentiality. For in the electric car of to-day there is but the practical electric car, and nothing more; while in the kite that Franklin flew was the electric car, the telegraph, the telephone, the Atlantic cable, the arc-lamp, and who can tell how much beside?

The true botanical method recognizes the true position of the plant. It is not a puzzle, a medicament, a source of food, a shelter from the storm alone. It is also a living thing, a bundle of atoms, a chemical laboratory full of compounds, a curious mechanism, a tiny bit of the earth's crust, a wreath of the primæval nebula, a portion of the universe. It is as man himself is.

MEMORY TRAINING IN PUBLIC SCHOOLS.

WALTER VAUGHAN, MONTREAL.

TO many of those who have considered the matter it must have seemed strange that no efforts, well directed or otherwise, have been made to introduce into our public schools the systematic training of the memory; by which is meant something very different from any, and every, artificial system of memory-aiding. A glance at the history of mnemonics is sufficient to show us that not one of the systems, of which we have any knowledge, has had more than a temporary success — and that undeserved.

How old is the use of artificial aids to the memory we cannot tell. Frequent references in Plato and Aristotle warrant the assertion that it was much favored by the Greek sophists, and we have the authority of Cicero and Pliny for saying that, in their time, the Romans attached considerable importance to the art, the last named writer giving enviable notoriety to one Metrodorus, of whom he said that "he heard nothing that he did not remember." But in the time of Quintillian the art decayed, and we hear little or nothing of it again until the thirteenth century, when Roger

Bacon's *De Arte Memorativa*, and many other treatises on the art were published. From that time to the present the art has received attention only by fits and starts, as when public curiosity has been awakened by the writings of a Richard Grey or a Wincklemann (who introduced the method of giving letters to figures so as to express dates and numbers by words), or when astonishment has been temporarily excited by the mnemonical feats of a Petrus de Ravenna or a Lambert Schenkel. In recent times the "*Memory and the rational means of improving it*" of Dr. Edward Pick gained a wide circulation; and quite lately one Professor Loisette, hailing from London, must have reaped, and, for all I know to the contrary, may be reaping still, a rich harvest from that field of gullables, the British public.

Generally, it may be stated, some Simonidean feats every now and then notwithstanding, that every method of artificially aiding the memory has failed, and rightly. They have failed, first, because they were not founded on any rational or natural basis, and, secondly, because to acquire, and be able to readily apply, any one method would entail as great an effort and expenditure of time as a man of ordinary capacity would make in getting a good grasp of one or more of the various branches of knowledge.

Clearly then we cannot look to any method now known to us of artificially aiding the memory as the means whereby to compass the end in view, and we have to fall back on the resources of nature to find what we want.

Memory may be said to comprise three components: reception and retention; reproduction; and localization, or, as it is commonly called, recollection. The first two are innate in the normal man; the last is a purely psychological and subjective faculty. To put it in another way — which may not be the less forcible because, perhaps, unscientific — the brain receives, through the nervous system, certain impressions, and retains *all* those impressions in much the same way as a sheet of blotting paper receives and retains the impress of an india-rubber marking stamp — but with this difference, that the brain impressions are subject to reproduction; and, as the impressions on the blotting paper are more or less distinct in proportion to the force employed in making them, so the impressions on the brain are more or less clear and well-defined in proportion to their vividness at the time of reception. Again, in like manner as the blotting paper retains all the impres-

sions made on it so does the brain; and, as in both cases impressions may be made, which overlap, and lie upon, or adjacent to, other impressions, it is the power of localization, or recollection, which is employed in bringing, as it were, to the surface the outline of any one or more individual impressions.

That it is more correct to speak of memories in this connection than of memory, and that impressions are rather stored in cells than impressed (though that also), I am aware; and even though it is highly probable that my illustration in other respects, will not receive the assent of scientific men, yet the principle involved in it is essentially the true one, and, in default of a better, it must serve my purpose.

Of the three components let us direct our efforts of improvement to that which affords us the greatest scope. Reception and retention, and reproduction are natural functions of the human brain, and, in the healthy man, with the *mens sana in corpore sano*, it is right to assume that they are properly developed, and that their operation is perfect. It may be said, nay, it is said, that the receptive and retentive faculties of particular individuals are greater than those possessed by the majority of their class. We speak of Mr. A. or Mr. B. having a *very* retentive memory — and, perhaps this is true, though it is certainly questionable.

Upon examination it will probably be found that the receptive powers of Mr. A., though apparently, are not really, above the average, but that he gains his advantage by more concentrated attention, and closer observation; and that the retentive power of Mr. B. — and this is obviously easy of demonstration — obtains its comparative lustre only by his faculty of localization or recollection being well exercised and developed.

Regarding this, the notice of the feats of some well-known giant memories is instructive and interesting. Cyrus is said to have known the name of every soldier in, what was in his day, an enormous army. Euler, after he became blind, could repeat the whole of Virgil's Aeneid. Magliabechi performed an astonishing feat: after reading and returning a borrowed manuscript to the owner, the latter pretending that it was lost, begged him to write out as much of it as he could remember; and his request was granted by Magliabechi, unassisted except by momory, writing it in its entirety. Seneca could repeat two thousand words after a single reading; Scaliger a hundred verses or more; but both sink

into insignificance when compared with the boy hailing from Corsica, who could repeat forty thousand words, sense or nonsense, backwards or forwards, after hearing them once. John Fuller, a land agent of the County of Norfolk, could correctly write out a sermon or lecture after hearing it once; and one Robert Dillon could, in the morning, repeat six columns of a newspaper, which he had read the preceding evening. Most wonderful of all was George Watson, who, while in all other respects the type of the hobbledehoy and country bumpkin, could tell the date of every day since his childhood, and how he occupied himself on that day. Porson had the Greek authors, book, chapter, verse, and line, at the tip of his tongue. Mezzofanti is said to have known seventy different languages and dialects, and upon one occasion to have succeeded, after twenty-four hours study, in readily conversing in a language, which before was entirely unknown to him, and which seemed totally different from all he possessed. An old beggar of Stirling, some sixty years ago, yclept Blind Alick, knew the whole of the Bible by heart so that he could give verse, chapter, and book for any quotation, or, vice versa, correctly give the language of any given verse. These instances could be multiplied; and many well known names will doubtless rise to the mind of the reader. Who does not remember the unique powers of Macaulay? In a different catagory must be placed the calculating boy, who "saw his sums as in a vision," and the marvellous blindfold chess-player of Morphy, Blackburne, and others.

The foregoing suggests one or two remarks. It is seen that men of low station, comparatively uneducated and illiterate, have shared with others known to fame for their intellectual powers the possession of an abnormal memory; from which it may not unreasonably be argued that they were gifted by nature from the first, with a faculty of recollection abnormally developed. It would also appear that the memories of nearly all I have mentioned were noticeably strong only in one direction. It is not recorded of Mezzofanti that he remembered so quickly other things than languages, while we know that Porson's memory was sometimes notoriously weak, when he had not to do with his beloved idols, the dead languages. Macaulay perhaps displayed the best developed memory, equal in all its parts, exercised in every direction. Setting aside the exercise of attention and observation, which are great factors when we consider both the quantity

of impressions and their vividness, how do we know then that it was the faculty of recollection which enabled these men to shine above their fellows?

We have clear proof of it. If Mr. C., an intelligent man, who has a weak memory, reads, let us say, a chapter of the Bible, he may not be able to quote correctly any connected ten words, but let any one misquote a verse of that chapter, and Mr. C., though he may, or may not, then recollect the right version, will at once remember, and point out, that the one given is incorrect. Again, who of us does not often experience an inability to remember the particulars of some more or less important event in which we were concerned, even after strenuously searching the memory for it; some kind friend mentions but one little fact connected with it, when the scene, the event, and the circumstances — often trivial and of no account — are recalled, as it were, in a flash.

It being then the power of recollection, the subjective faculty, that we must set about improving, what method shall we adopt? and how may it be applied to the best advantage in the public schools? These are two very distinct questions; the ease with which we can answer the one is balanced by the difficulties surrounding a practical solution of the other. I propose shortly to speak of them in their order. But first what is the condition of the memory of the average individual, child or adult? I fear that most of us can truthfully but echo what Montaigne said of his own: —

"Memory is a faculty of wonderful use, and without which the judgment can very hardly perform its office; for my part, I have none at all. What any one will propose to me he must do it by parcels, for to answer a speech consisting of several heads I am not able; I never receive a commission by word of mouth without a note-book. And when I have a speech of consequence to make, if it be long, I am reduced to the miserable necessity of getting by heart, word for word, what I am to say. I should otherwise have no manner nor assurance from fear that my memory would play me a slippery trick. The more I distrust it, the worse it is; it serves me best by chance; I must negligently solicit it, for, if I press it, it is astounded, and all at once begins to stagger; the more I sound it the more it is perplexed; it serves me at its own hour, not at mine."

Allowing the margin that we usually and indulgently do to this writer, who sacrificed much to the honor of wit and the glory of epigram, we may say with authority that, if these words were true

of him, they are also true of the vast majority of us — if, indeed, they are not more applicable to that majority than they were to him. It is then the memory so constituted for which we must seek a method of improvement — this condition of the localizing faculty that we must seek a means of avoiding. To diligently search for and apply that method and those means is so obviously imperative that one would suppose the efforts of every one entrusted with the noble work of education to have been early and strenuously exercised in that direction. If so, those efforts have been startlingly barren of fruit; the practical result may perhaps be mathematically expressed more exactly by a minus quantity than by zero.

Unfortunately (to paraphrase the words of another) teachers generally, forget, if they ever knew it, that their duty consists of *training*, not of mere *telling*. The one result, calling for any notice, is the learning by rote prevailing in most schools, and this, in its method, employment and effect, is, I venture to think, so bad as to be the equivalent of a minus quantity. Montaigne says "Scavoir par cœur n' est pas scavoir"; and Herbert Spencer, than whom no one is a greater authority on such matters: —

"The rote-system, like other systems of its age, made more of the forms and symbols than the things symbolized. To repeat the words correctly was everything; to understand their meaning nothing, and thus the spirit was sacrificed to the letter. It is at length perceived that in this case as in others, such a result is not accidental but necessary; that in proportion as there is attention to the signs there must be inattention to the things signified."

But of more weight than Mr. Spencer's dictum is the fact itself that the rote-system in use has, after an incredibly long trial, been proved to be utterly worthless, and has been discredited, and discontinued, by many teachers, while all distrust it. Discarding altogether learning by rote, our task is now to find the proper method of improving and aiding the memory, i. e., of strengthening and developing the faculty of localization in the individual. And we need not go far to search for it, for the most natural and obvious one is, as it is in so many other matters, the proper one.

Hering says (not having it in the original, I take it from a French translation): —

"Daily experience proves that a muscle grows the stronger the oftener it works. The muscle fibre, which at first responds feebly to the excitation transmitted by the motor nerve, responds more vigorously the more frequently it is excited, pauses and rests of course being presupposed. After each action it is fitter for action again, more ready for the repetition of the same work, better adjusted for the reproduction of the organic process.

"It gains more by activity than by long repose. We have here in its simplest form that which approaches nearest to physical conditions — that faculty of reproduction which is found in such complex shape in nerve substance. And what we see in muscular tissue we see more or less in the substance of the other organs. We see everywhere that an increased power of organs accompanies an increased activity with sufficient intervals of repose."

This dictum of Hering's is endorsed by the unanimous assent of all men of science; by common sense; and, better than all, by the universal experience of mankind; and to nothing could it be applied with more exactness than to the organs of the brain and the faculty of localization.

The functions of the memory must be trained in a manner similar in all respects to that employed in strengthening and developing the muscles of the well-trained, all-round athlete, not, let it be observed, the athlete, who excells in one or two exercises only, — the specialist athlete.

The athlete is dieted with sufficient, and not more than sufficient, of the most wholesome, nourishing, and strengthening food for giving perfect health to the body, and supplying the muscles with their motive power; so ought the memory to be regularly stored, not overloaded, with that food for the mind, which will afterwards best serve the man.

The trainer first exercises the would be athlete's muscles very gently and frequently, insisting upon rest during the intervals; so must the localizing faculty of the memory be exercised frequently and, at first, very gently — coaxed, not forced — the intervals being spent in repose. The athlete's exercises, from being in the beginning very gentle and frequent, are gradually, very gradually, increased in violence of motion, and the length of their duration; so should the exercises of the recollection. It is imperative that the athlete avoid overstraining his muscles or he will break down; so must be avoided the overstraining of the recollection, which, in its results, is as bad as, if not even worse than, the over-

straining of the muscles. The athlete's exercise must be regular in its gradation, that is, he must not do a very little one day and very much another, but pursue his course as evenly as possible, with neither too violent exertion nor too long a rest, or his muscles will lose the benefit of the exercise; equally regular and unbroken in its periods of excitation and rest must be the exercise of the recollection: as its powers gain strength day by day in an imperceptible quantity, as trifling as possible should be the increase in the task allotted; and, if, upon occasion, it is tasked with more than ordinary severity, it must have a correspondingly larger period of rest. Lastly, the exercises of the athlete must be even, not partial, such as will develop all his muscles and strengthen all his members; similarly should the recollection be exercised in relation to all things worthy of being stored in the memory.

It is not within the scope of this paper to go into the minutiæ of such training — perhaps I have omitted even some of the essentials — but enough has been said to suggest to the minds of all the method which I have attempted to outline in brief; the details, the rounding of all its parts, and the finish are left for more competent hands. But carried out consistently, thoroughly, and patiently, who can doubt of the result; its incalculable advantages both as a factor in education, and in the struggle for life? Regarding it in one aspect only, and that by no means the most important, its enormous value as a time-saver is indisputable, and affords more than sufficient ground, if not for its systematic adoption, at all events, for a patient and thorough trial of it.

Having shown that the localizing faculty of the memory is the one for which we should seek the best method of development and improvement; and having, it is believed, found that method, how can it be put to practical utility in the public schools? The object of this paper is to offer a suggestion upon this point, and while my remarks may apply to all schools without discrimination, they are especially intended for the schools of the lower and middle classes; for the students who attend them, on the average enjoy a shorter course, earlier seek their livelihood, and have less time in after life to devote to the pursuit of knowledge, than the usually more fortunate students whose fathers are blest with much bullion.

It has been said that the unerring destiny of all reforms is finality; and the method, which I am about to propose, of carry-

ing out the one indicated is offered in the belief that a better one will quickly be defined, and with the hope that it will ere long be the means of suggesting the best. Several ideas more or less practical, and all attended by many difficulties, have occurred to me. I give the one, which I have thought the least difficult of execution; and most likely to lead to practical results, though I fear that, seriously considered with a view to its possible adoption, it may startle the pedagogue and violently disturb the stagnant mind of the average schoolmaster. It is this: that each school should be provided with a memory-master whose whole duty should be to train the memories of all the scholars. That proposition looks very simple on paper but I think I hear him of the stagnant mind saying "most impracticable; surrounded with difficulties." Let me clear some of them away, The memory-master need not himself be the possessor of an abnormal memory, for he will not be called upon to exhibit his own powers in that direction, but he must understand thoroughly the rudiments, at least, of contemporary science, physiological, and psychological, of the organism and functions of the brain so far as, if no further than, they relate to the memory. The memory-master need not be a very learned man. It will be sufficient if he keep himself informed of what has been and is being taught in each class of his school, and, himself, keep abreast with that teaching; not, in the ordinary school, a hard task for an ordinary intelligence.

The memory-master cannot, of necessity, train the scholars individually. Let him train them class by class, always remembering that a class is composed of individuals, in any two of whom the characteristics are not precisely similar. His duties may be these: to exercise the recollections of the members of each class once, twice, thrice, as often as possible, in every week, the exercise occupying from fifteen minutes to an hour in duration; to embrace in his exercise not only the instruction a class has immediately before received, but all knowledge which the members of that class have at any time acquired, or are supposed to have acquired, from the lessons and instruction they have received; the master, for example, questioning one scholar, one moment upon a problem of Euclid studied two years before; another scholar, the next moment, upon the construction of a line or verse of a Latin author studied six months earlier; a third upon some histor-

ical event discussed a week ago; and so on, constantly changing his subject and dodging about the class, paying particular attention to, coaxing and encouraging the members who display the least power of recollection. As a corollary of this, the scholar must not know the ground to be covered in any exercise, or have any inkling before hand of the questions to be asked.

If prizes are given, those allotted to the scholars displaying the largest powers of recollection should be greatest in number and the most honorable, for the measure of recollection is the measure of general knowledge. In schools, if there are any, in which the individual thought of the scholar is called into play recollection must, of course, yield pride of place, but I believe that such schools are very few and far between.

There are schools whose funds are not sufficient for the additional burden of a memory-master's stipend? In them let the teacher of each class conscientiously perform kindred duties. The government, on economical or other grounds, will not make the necessary provision for carrying out the reform in the national schools? If, in the private or endowed schools, the reform is introduced, and is eventually endorsed by success, the government, which is but the creature of public opinion, must follow.

Conceding, what is highly probable, that this plan for carrying out the suggested reform is far from being the best; recognizing its imperfection, the objections to and the difficulties surrounding it, but making allowance for the vagueness, indefiniteness and want of finish of the outline, who will deny that even this plan, carried out thoroughly and patiently, will indubitably result in good? Will it advantage the scholar if his learning be more thorough and his knowledge more abiding; if his time be not largely wasted by needless repetition; if he be enabled to utilize the time now wasted, in adding to his store of mental wealth; if, in after life, he has a well trained memory, reliable, agile, full of resources, and ever ready to respond when called upon? Then let this method I have suggested be seriously and earnestly tested, or cast aside in favor of better.

ELEMENTARY SCIENCE IN THE PUBLIC SCHOOLS.

ARTHUR C. BOYDEN, A. M.

THE following is a portion of the report of a sub-committee of the New England Conference of Educational Workers, appointed to investigate the work in elementary science actually performed in the various town systems of schools. This report is preliminary and relates only to Massachusetts. Two classes of towns are found, the first in which the work is limited to a few schools, or desultory in its character varying with the ability and time of the individual teacher. The amount of this work is increasing and it is greater than most persons suppose, but it is difficult to ascertain the results, except in the most general way. The other class of towns represents the few who have systematic outlines of study in elementary science, special supervisors or interested superintendents capable of directing details, regular meetings of teachers for instruction and direction, and who are actually doing this work as one of the regular subjects in all the grades.

As examples of this systematic work, are Quincy and Brookline, each of which has a special supervisor, trained for the purpose, who lays out the science work in detail, prepares printed outlines, meets the teachers of the different grades for instruction and direction, regularly inspects the schools, giving added suggestions, and teaches the children more or less as deemed necessary. Among the towns whose superintendents are especially interested in directing the work are Hingham, Brockton, Somerville, Clinton and Andover; in these places printed outlines and suggestions are given to the teachers of the different grades, some meetings are held under the guidance of the superintendent or experts invited from other places, the work carefully watched, and means supplied as far as possible.

It was felt by the committee that personal investigation of the work in operation would furnish the only reliable data, accordingly this work has been begun and this report will be limited to the observations made in four of the places mentioned as intro-

ducing elementary science into all the grades of all the schools. The direction of the investigation has been threefold — first, the lines of work pursued, what, when, and how; second, the relation of the elementary science to the other subjects of the curriculum; third, the results observed by the teachers. We have drawn no conclusions as yet, only tried to ascertain the facts.

The subjects used by the teachers are about in the following order: plants, minerals, animals, natural phenomena, elementary physics and chemistry. Of these the observation of minerals and the experiments in physics are limited mostly to the winter months. The materials are almost entirely brought by the children, who manifest great interest in their collections. In some schools, teachers report over three-fourths of the children as making their individual collections, aside from the "school collection" to which all contribute. In one town the children of all the grades below the high school made collections of from thirty to one hundred and seventy plants of the region, finding the common name, reporting the time of flowering and the habitat and observing the general marks of distinction of a large proportion of them. These plants in each grade were kept in water by means of racks prepared for the purpose, and they furnished from day to day abundant material for observation and comparison. The principal subjects of plant work are the common trees, shrubs and wild plants, their parts, especially the leaves and flowers, and uses to man. These, with the germination of seeds form the spring subjects; while the changing leaves, fruits and seeds are used in the fall, and during the winter the general appearance and condition of the trees and plants, the buds and their arrangement, the structure of the stems, and the evergreen trees are considered. In the case of minerals, those found in the quarries, ledges and gravel hills of the town are mostly used with application to the common rocks and soils, careful attention being given to the uses and any industries based on these materials. Among animals the observation of domestic animals is used in the conversational lessons of the earlier grades, outdoor excursions with the teacher to observe the positions and habits of the common animals, especially birds and insects, live and mounted animals in the schoolroom for the more careful study of the parts in the upper grades. In natural phenomena, the work consists of weather observation and record, changes in the forms of water,

changes in the position of the sun and moon, the common groups of stars, and the changes in vegetation and animal life in each season. In one town emphasis is placed on the subject of elementary physics and chemistry in the upper grammar grades, a few trained teachers aid the others in preparing for the simple experiments at meetings held in the high school laboratory. Very simple apparatus is made and used to illustrate the pressure of the air, movement of water, heat, electricity, the common machines and the simplest chemical changes.

The time given to the science work varies from ten or fifteen minutes per day for direct observation in the lower grades to a usual recitation period in the grammar grades with the direction to use the results of this observation in other lines as much as possible.

The relation of the elementary science to the other subjects in the curriculum is an important question when teachers are asked to begin this work, and in most cases it is placed in the closest connection with the language exercises and drawing. In many schools the "nature work" occupies the schedule time and forms the basis of most of the language lessons, preparing for the earliest words and sentences read and copied by the little children; for the use of special words describing actions, qualities and comparisons; for the grouping of sentences into simple, oral and written descriptions: for describing an object, piece of apparatus or experiment according to a definite order of procedure. Drawing is used from the lowest grades, tracing and cutting animal forms, modeling fruits and seeds, sketching leaves, fruits, changes in seeds, the mingling of constituents in granite, groups of stars, opening of buds, general appearance of trees, shells, illustrative drawings accompanying written descriptions, and the drawing of apparatus used in the simple experiments. The supervisors of science consult with the directors of drawing for the systematic arrangement of exercises.

Observation exercises are used in direct preparation for certain reading lessons and the tendency is noticed to increase the amount of supplementary reading along scientific lines, many of the recent natural history readers being introduced for this purpose. Some are cautious in using these books for fear of displacing actual observation by reading about natural objects. Similar connection has been made with geography, as for example, the careful observa-

tion of specimens of sponges and corals preceding a reading lesson from "Our World." One of the towns mentioned has made especial application of the nature work to the geography in the observation of the weather, forms of water, soil, stars, typical animals, and the collections of the products of different countries, arranged to illustrate the different climatic effects.

As to the results the teachers themselves report an increased interest and belief in the value of scientific observation as a basis for other school work; and an earnest desire to improve their own fitness is observed. The supervisors report a great willingness to enter on the work so far as the teachers feel confidence in their own ability. The results noticed with the children as reported by the teachers may be grouped as follows: — "A great interest in the objects about them in nature." "Children are using their eyes; they are quicker to observe resemblances and differences." "Improvement in expression, both oral and written." "A better understanding of objects mentioned in other subjects." "Increased power of looking into things in all subjects." "A quickening of mental power which ordinary school subjects have not given." "The drawing of natural objects has neutralized the tendency to conventionalize all drawings of objects." "A greater readiness to draw in other subjects." "It has increased the spirit of sympathy between the teachers and the 'dull' pupils."

These reports are from work personally observed and reported at the time, and it is the intention to continue this kind of investigation, hoping that from it some practical conclusions may be suggested in regard to what work in elementary science may successfully be done in a system of schools by the ordinary teachers.

HALF AN HOUR WITH PLATO

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"AND now," said Madame De Stael to Sir James Mackintosh, "tell me all about the British Constitution in ten minutes." A few moments might easily contain all that I can tell of Plato and his philosophy, for, as Mr. Pickwick said of Chinese metaphysics, "It is a very abstruse subject to one who is not favored with what is called a musical ear, and equally so to one who is." But the praises of Plato have been so often sung by

louder harps than mine, that, if the moments you give me were hours they could be more than filled from the books written of this man, who has tuned the heart and framed the mind of the noblest of mankind for two thousand years; who stands, Emerson says, "between the truth and every man's mind, making it impossible to think on certain levels except through him," and he adds that among secular books, Plato only is entitled to Omar's fanatical compliment to the Koran when he said, "Burn the libraries for their value is in this book." The happy century into which Plato was born saw the perfect flower of Greek culture. It was the illustrative epoch of Greek intellect and Greek refinement. The youth of Plato was contemporary with that of Xenophon and Cyrus the younger, the manhood of Alcibiades and the declining years of Socrates. The bright sunset of Pericles still lingered in the Athenian sky. The city was fresh from the hands of Phideas. The fine arts were towering to their meridian altitude, perfect works of architecture seemed things of course, and "they cut Pentilican marble as if it were snow." The old oracle seemed fulfilled, "Athens shall be as high above all other cities as the eagle in the clouds above other birds." Into this beautiful world came Plato, a proud patrician to the finger tips, with a fine physique, a master mind, and a noble air, which accompanied him as inevitably as the nimbus does a saint on the canvas of Titian or Murillo. Plato has no external biography. If he had loves, wife or children, we hear nothing of them. He ground them all into paint. Yet Plato, whose opposition to poets grew to be so deep and bitter, sang some sweet songs in his youth. Of which a line now and then still lingers in the air — like this:

> "Thou gazest on the stars, my life, ah, gladly would I be
> Yon starry skies, with thousand eyes, that I might gaze on thee."

Plato was intensely melancholy, that great, broad brow which gave him his surname was wrinkled and sombre. The brawny shoulders were bent with thought. He never laughed. "As sad as Plato" became a proverb. Lewes calls him unamiable, and finds an echo of that quality in his works, and says also that he had few friends. "Few friends!" can that be true? Let us, at least, mark this bit of information as "doubtful," for that he must have been well loved and had true friends seems proven, even by our modern touchstone of gold; for, when cast into slavery, as happened in his youth, he was ransomed by a friend. Upon his return

to Athens his fellow-citizens sent the money to Anniceres, who refused it, saying, "The Athenians are not the only people in the world who have a right to esteem Plato." The money was then used to buy the grounds of the academy which his genius made famous and his grave made sacred — the spot Cicero turned aside to visit before entering the gates of Athens. Still our Plato was no popular idol. His message was not to the many. Indeed, he showed a fine disdain for the pleasure-loving, treacherous Athenian multitude, whom his dear and wise old master had loved and taught and died for. That old skeptic, Montaigne, says, "I, who am as sincere and perfect a lover of virtue of that stamp as any other whatever, am afraid that if Plato in his purest virtue had listened and laid his head close to himself he would have heard some jarring sounds of human mixture." But, when God makes a prophet he does not unmake the man. Another, (was it De Quincey or Lewes again? I cannot tell) calls his ethics those of a logician, not of a large-souled man familiar and sympathizing with the complexities of life, and suited only to an impossible state of humanity. But no, indeed! character was the secret of his high speech and his eloquence always had a man behind it. Like Him who said, "Be ye perfect," he knew what was in men, for man will live or die for perfection — for mediocrity he will neither live nor die.

To speak of Plato and not of Socrates — his master, mouth-piece, and hero — is not difficult, it is impossible. On the page of history are few names that have been handed down to us so proudly and lovingly as that of this brave and gentle martyr. Every one who has heard of Greece and Athens has heard of him and knows that he was supremely good and supremely great. Each successive generation has confirmed the Delphic oracle, that no man was wiser than Socrates. Socrates represents the popular Athenian character elevated by the highest genius. If he was exclusively critical, rationalizing, unadventurous, prosaic, in a word something of a "Philistine," so, we may suspect, were the mass of his countrymen without the wings of genius upon which he rose to touch the spheres. His society was sought by men of all types. In this: —

> "His magic was not far to seek,
> He was so human! whether strong or weak.
> Far from his kind he neither sank nor soared,

But sat an equal guest at every board.
No beggar ever felt him condescend,
No prince presume; for still himself he bore
At manhood's simple level, and when e'er
He met a stranger, there he left a friend."

Let us add to this the touch of genius, always the broad touch of genius, which runs like a thread of gold all through his life and character, and give up trying to describe this bewildering combination of wit, wisdom and simplicity. This man of the world, lover of feasts and of youth, ascetic and critic, according to Cicero, met philosophy upon her first descent from heaven and led her into the towns and houses of men. And so he went up and down the familiar streets. Wherever the wind blew the argument, there he followed bland and subtle; questioning everything, "knowing nothing,"—one of those of whom he tells Theodorus "some think nothing and others can never think enough." And we, like Callicles, are forced to confess, "somehow or other your words, O Socrates, always appear to me to be good words." After the battle of Potidaea, where he had saved the life of the young Alcibiades and distinguished himself by courage and endurance, he comes back to Athens, and the next morning is looking up his old haunts. Instead of fighting his battles over we find him in the Palastro quietly discussing temperance with the beautiful Charmides; or, another day, at the house of a friend he is discoursing and arguing with sophist, philosopher—any man who will half do his part towards a discussion. Now it is Protagoras whom he respectfully dismounts with his sharp weapon of dialectics. And again the youthful Lysis, with whom he gently tosses the ball of argument, hoping to discover what friendship is. "And as the company broke up," he tells us, "I said a few words to the boys at parting. O Menexenes and Lysis! will not the bystanders go away and say, 'Here is a jest,' you two young boys and I, an old boy, who would fain be one of you, imagine ourselves to be friends, and we have not as yet been able to discover what is a friend." This is but the light skirmishing which preceded the life-long struggle with the demons of wrong, untruth and sophistry that infested those streets of Athens. Like the Baptist, nobly careless of self, he was but a voice proclaiming the truth, and so preparing the way for a greater who was to lift the lamp of life still higher. "Tell me," he says, "what do possessions profit a man if he have neither sense nor wisdom." "O Socrates!" says poor Meno, "I

used to be told before I knew you, that you were always puzzling yourself and others, and now you are casting your spells over me." But Socrates, bland and tactful soon smoothes the ruffled feathers, and later we hear, "I feel somehow that I like what you are saying."

"And I, Meno, like what I am saying. Some things I have said of which I am altogether confident, but that we shall be better and braver and less helpless if we think that we ought to enquire, than we should have been if we had indulged in the idle fancy that there was no knowing and no use in searching after what we know not, that is a theme upon which I am ready to fight in word and deed to the utmost of my power." Again he says: "A man who is good for anything ought not to calculate the chances of living or dying, he ought only to consider whether in doing anything he is doing right or wrong, acting the part of a good man or a bad." And still again, "Now I am persuaded of the truth of these things and I consider how I shall present my soul whole and undefiled before the Judge in that day. Renouncing the honors at which the world aims, I desire only to know the truth, and to live as well as I can; and, when the time comes, to die and, to the utmost of my power I exhort all other men to do the same." In the Symposium, —

> "Where none were sad and few were dull
> And each one said his best,
> And beauty was most beautiful
> With vanity at rest." —

we find this homely picture of a Socrates, the honored guest. Here the wise physician and Aristophanes discourse bravely of Love. Agathon, the tragic poet, tells of the young god who lords it over all, is stronger than death,—

> "Gives peace on earth and calms the stormy deep
> Who stills the waves and makes the sufferer sleep."

At last Socrates declares himself struck dumb by so much eloquence. "For I, in my simplicity, imagined that the topics of praise should be true, and I felt quite proud, and thought that I could speak as well as another. Whereas, I see now, that the intention was to attribute to Love every species of greatness and glory, whether belonging to him or not. Farewell then to such a strain, for that is not my way of praising; no indeed, I cannot attain to that. But, if you like to hear the truth about Love, I am

ready to speak in my own manner." Having permission and having argued a bit, he goes on to rehearse what he had learned from Diotima of Mantineia, who was a wise woman in this and many other branches of knowledge. "What then is Love," I asked, "is he mortal?" "No." "What then?" "Neither mortal nor immortal, but a mean between them." "What is he then, Diotima?" "He is a great spirit, mediating between the gods and men, the child of plenty and poverty. And as his parentage is, so also are his fortunes. In the first place he is always poor, and anything but tender and fair, as the many imagine him; and he is hard-featured and squalid, and has no shoes, nor a house to dwell in, on the bare earth exposed he lies, under the open heaven, in the streets, or at the doors of houses, taking his rest; and, like his mother, he is always in distress. Like his father too, whom he also partly resembles, he is always plotting against the fair and good; he is bold, enterprising, strong, a hunter of men, always at some intrigue or other. Keen in the pursuit of wisdom, and never wanting resources; a philosopher at all times, terrible as an enchanter, sorcerer, sophist; for as he is neither mortal nor immortal, he is alive and flourishing at one moment when he is in plenty, and dead at another moment, and again alive by reason of his father's nature. But that which is always flowing in is always flowing out, and so he is never in want and never in wealth, and he is also in a mean between ignorance and knowledge." Socrates could see a joke as well as make one, and he, at least, must have smiled over the exquisite contrast between Agathon's tender young god of Love, who dwelt among the flowers, and the tough old satyr whom Alcibiades berates and praises and crowns. Other contrasts we think we see both between the rhetoric of the poet and the words of Socrates; also, between the Socrates whom Alcibiades knew, and the great one whose noble speech expresses to us the royal man whose art is truth, for many other brave words did he speak among the men of Athens. As for example, to Callicles: "O my friend, I want you to see that the noble and the good may possibly be something different from saving and being saved, and that he who is truly a man ought not to care about living a certain time, he knows that none can escape the day of destiny, and therefore he is not fond of life, he leaves all that with God, and considers in what way he can best spend his appointed time" and then, "Wherever a man's place is, whether the

place which he has chosen, or that in which he has been placed by a commander, there he ought to remain in the hour of danger, he should not think of death nor of anything but disgrace, and this, O men of Athens, is a true saying." But we can "only dip a cup into the sparkling fountain and drink and go on, we cannot hope to exhaust the fountain, nor carry away with us the well itself." The clouds gather about our hero, and we see him next before the judges. Not pleading for his life, but summing up for posterity the principles upon which he has lived and is willing to die. Every one should read his defence, for, as was said of Seneca, "No truer words could have been spoken by one who knew God than were spoken by this man to whom the true religion was unknown." Read too, the long talks with his friends while he waited in prison, until the sunset of the last day came, the cup was drunk, and sleep gently laid the noble Socrates in the arms of his brother, Death. But oblivion scatters no poppies over him. And, thus, Plato has built a monument to his friend out of his own brave words and deeds. The Statesman, the Laws, and even the Republic, Plato's greatest works, are, I have to own, beyond my woman's wit, and I gladly take shelter under the ample cloak of Carlyle, who frankly owns that he cannot read Plato.

But there are some fine and beautiful things scattered through these dialogues which no one could fail to understand; for instance, when young Socrates says, "There is nothing I like better, Cephalus, than conversing with aged men like yourself; for I regard them as travellers who have gone a journey which I too may have to go, and of whom I ought to inquire, whether the way is smooth and easy, or rugged and difficult. And this is a question which I should like to ask of you who have arrived at that time which the poets call the "threshold of old age." Is life harder towards the end, or what report do you give of it?" "I will tell you, Socrates," he said, "what my own feeling is. Old men flock together; they are birds of a feather, as the proverb says; and at our meetings the tale of my acquaintance commonly is — I cannot eat, I cannot drink; the pleasures of youth and love are fled away; there was a good time once, but that is gone and now life is no longer life. Some of them lament over the slights which are put upon them by their relations, and then they tell you plaintively of how many evils old age is the cause. But I do not believe, Socrates, that the blame is where they say; for if old age were the cause, I too, being old, and every other old man could have felt

the same. This, however, is not my own experience, nor that of others whom I have known. How well I remember the aged poet, Sophocles, when in answer to the question, 'How does love suit with age, Sophocles, are you still the man you were?' 'Peace,' he replied, 'most gladly have I escaped that, and I feel as if I had escaped from a mad and furious master.' That saying of his has often come into my mind since, and seems to me still as good as at the time when I heard him. For certainly old age has a great sense of calm and freedom; when the passions relax their hold, then, as Sophocles says, you have escaped from the control not of one master only but of many. And of these regrets, as well as of the complaint about relations, Socrates, the cause is to be sought, not in men's ages, but in their characters and tempers; for he who is of a calm and happy nature will hardly feel the pressure of age, but he who is of an opposite disposition will find youth and age equally a burden."

This is pithy, "As soon as a man has a livelihood he should practice a virtue." And here is a bit of nineteenth century realism. "Did you never observe the narrow intelligence flashing from the keen eye of a clever rogue? How eager he is, how clearly his paltry soul sees the way to his end; he is the reverse of blind, but his keen eyesight is taken into the service of evil and he is dangerous in proportion to his intelligence." Of immortality: "The whole period of three score years and ten is surely but a little thing in comparison with eternity." "Say rather, nothing," he replied. "And should one immortal being seriously think of this little space rather than of the whole?" "Yes," he said, "I think that he should. But what do you mean?" "Are you not aware," I said, "that the soul is immortal and imperishable?"

He looked at me in astonishment, and said, "No, indeed; but do you mean to say that you are able to prove that!"

"Yes," I said, "I ought to be able, and you too, for there is no difficulty."

"My council is that we hold fast to the heavenly way, and follow after justice and virtue always, considering that the soul is immortal and able to endure every sort of good and every sort of evil. Thus shall we live dear to one another and to the gods, both while remaining here and when, like conquerors in the games who go round to gather gifts, we receive our reward."

And so Plato piled up these marvelous books, until finally the strong years conquered him, and he fell asleep with the pen in his hand, and his work entered into the life of the world.

CLASSICS IN GRADE WORK.

SUPT. EDWIN C. THOMPSON, SAGINAW, MICH.

"BLESSED are the few," says Dante, "who sit at the table where the bread of angels is eaten, and miserable those who have food in common with the beasts. I, who do not sit at that blessed table, but fled from the pasture of the vulgar, at the feet of those who do sit there, gather up some of the crumbs that they let fall, and know the miserable life of those whom I have left behind me, through the sweetness that I find in that which I have gathered up little by little am moved to pity — not forgetting myself — and have reserved something for the miserable which I have already shown to their eyes, and have thus awakened in them greater desire. Wherefore, wishing to serve them, I intend to make a general banquet of what I have shown them and of the bread necessary to such a feast, without which, the banquet could not be enjoyed by them."

In something of this spirit, I gathered a few good things — crumbs, you may be pleased to call them — from the table of the gods, which I placed before my children and tested their worth by the refiner's fire of bright eyes and interested faces, and which I now bring to you. Like Dante, I may have to apologize for making "oaten instead of wheaten bread;" but if I succeed in helping young people to a higher appreciation of the best in literature, I shall be amply repaid for the effort put forth.

It is a prevalent idea that the great high lights of the world's literature are far above the comprehension of our children; that Homer, Aeschylus, and Plato, Dante, Chaucer and Milton, Goethe and Schiller cannot be understood and appreciated by the average mind, that they belong to the realm of the higher studies of the college graduate, that these great masters who have shaped the world's thought do not touch our times, and have said nothing for our children. What! our children read Homer or Dante? Absurd! Such has been the feeling, but, fellow teachers, there is music in the air, and our little ones are listening. It is as yet but a murmur, but it is coming, sweeter and fuller. I hear it in the ages past, sung amid the ice-trimmed mountains of Scandinavia,

and gathered into full harmony in the "Niebelungen Lied." I hear it, in broken strains, sung from sea-girt Hellas, gathered into harmony by the "Blind Bard." I hear it, made still more musical, and sung, a little later, from the hills of Rome. Illuminated by the cross of Christ, I hear it again, a thousand years later, from the City of Flowers. Tempered and softened by the light of Christian thought, I hear it still again from the island kingdom, sung once more in the *darkness*. Again, across the sea, these songs of distant ages come to our land, and break forth in still more finished strains, in Hawthorne and Lowell. We welcome the coming. We believe in the song. There is so much that is beautiful in it; so much that appeals to child life, so much of creative fancy to uplift the hearts of little ones to God, and, with all, so much to interest and refine the thoughtful mind.

We believe in the myths for children. What would the child-world be without its Christmas with its Santa Claus and sacred associations? And yet, Santa Claus is a myth, and only in legend do we learn that this gladdest day in all the year for our little ones, is the birthday of our Saviour. So with many things that our little ones love.

We believe in the fairy tale. "Every man's life is a fairy tale, written by God's finger," and our "Cinderella" and "Rumpelstilzchen," and our "Sleeping Beauty," bring happiness to the child-side of every manly heart.

We believe in Homer and the Greek classics for children. The song of the Iliad is from the childhood of the world's literature, and its melodies are sweet to children.

We believe in giving our young people the strong food of Virgil, and the Latin classics, written in the hush of the world's history, when men, no longer engaged in war, had time to think. Why should we withhold from our children the products of this age of thought?

We believe, finally, in giving our children some idea of the great works of more modern times, "Faust," "The Divine Comedy," "Paradise Lost and Regained," as well as Shakespeare and the strong works of our own times.

To be a little more explicit and practical about all this: What child will not be interested in the beautiful "Aurora" as she steps forth from the palace of the sun and opens the cloud-gates of the morning with her "rosy-tipped fingers?" (I know a little

three-year-old who frequently teases her papa for the story of the "*buhfuh*" "*Ahwodah.*") How bright the eyes will grow as the dazzling chariot of Helios, attended by the Hours, drawn by the milk-white steeds in golden harness, and breathing fire, passes through the dawn gate, and pursues its restless course among the dragons of the sky, and rests in a sea of glory at eventide. How little hearts will soften and little eyes grow moistened till the tear drops fall as they listen to the story of Phæton, who, taunted by his mates, fled to his father, the rightful protector of every boy, and asks to drive his chariot for a single day and prove himself a worthy son by doing a god-like act. How the father, knowing the danger, sought to dissuade him from his purpose, but having promised, finally permitted the headstrong boy to take the reins, and how he met disaster and death. Such a tale touches young life to the quick and teaches many valuable lessons. And then, there is the mischievous little Hermes, with his *Lyre*, which, with a slight change in spelling, might be descriptive of the little god himself — why, the air is full of him. The hurricane, and the storm cloud, as well as the soft breezes of a summer day, suggest his presence. I have seen children laugh themselves tired at the thought of the tremendous sneeze of the little day-old god, which nearly frightened Phœbus out of his wits.

Cupid, with his golden and leaden tipped arrows, never grows old to children, and associated with Puck and the Brownies, forms a most interesting series of studies.

How the faces will grow serious and thoughtful as, a little later, they read the story of Prometheus, that crowning myth, and learn how, for the sake of mankind a heathen god suffered through untold ages, and with what delight will this character be followed through Aeschylus, Goethe, Shelley, Longfellow, and Lowell, and thus we bring you again to the thought, that while this kind of work in literature delights children, it is worthy the attention of more mature minds.

"O, Solon, you Greeks are always young. There is not an old man among you," said the Egyptian Priest. Perhaps this is the key to the remarkable adaptation of many parts of Homer, to the young. Certain, it is, that children from the fourth grade up, will listen with untiring interest to these stories. The wedding feast of Thetis, which leads up to the wonderful story of Troy, secures attention at once. Eros, with her golden apple of dis-

cord, thrown among the wedding guests — and the contest for beauty by Juno, Minerva, and Venus, in which the latter triumphs, always attracts. So story after story may be told. "Iphigenia," the "Heroic deeds of Diomedes," the "Night Spies," the "Wooden Horse," "Laocoön," the aged Priam pleading for the body of his son, Hector, the "Visit to Hades" the "Cyclops," the "Sirens," "Circe" and her Palace, the pathetic scene in which the dog Argus recognizes his master through all disguises, and then dies — these, and many others, may be told in the earlier years. These may be followed by the entire story briefly told, and a little later, again, with frequent free translations, and in higher grades by the reading of the text almost entire, and finally, if kind Providence permits, in the high school and college, by the story in Greek. Nor must we forget to make frequent character studies all along the line. The Homeric characters are well worth a boy's attention, since such men as Alexander and Napoleon drew from them the inspiration which made them the conquerors of the world, and, though Greek and Trojan contend no more in battle on the windy plains of Troy, Helen looks out upon us from the page of Homer, divinely fresh and radiant as when her "fair face launch'd a thousand ships and fired the topless towers of Ilium." Andromache and Penelope, have always remained beacon lights of domestic purity and faithfulness, while Nausicaa stands for all that is sweet and beautiful in young womanhood. Our girls may wisely study these characters.

There are many beautiful things in Euripides which will furnish food for thought, while children will laugh over the "Clouds," the "Birds" and the "Wasps" of "Aristophanes." "Antigone" and "Philoctetes," are within the child's comprehension from "Sophocles." The latter may be read in connection with Enoch Arden. "Oedipus" from the same author, may be made a sea study. The storm scene may be compared with that in Virgil, and with the description of the thunder storm in the Bible, Psalm 29. Nor must we forget the greatest writer of the age, Aeschylus, whose "Prometheus" and "The Persians" have been the admiration of all.

Virgil, passing now to another age, may be treated much as Homer; and as minor studies, Ovid's "Metamorphosis" and Lucian's "Dialogues of the Dead," are appropriate. What Don Quixote was to Chivalry Lucian was to heathen worship. Homer

struck the first blow at the Classical Deities when he made them do clumsy work in the Iliad, but Lucian laughed them out of existence. Then, says Fraser, "when we are dull and want to laugh," "ring the bell for Aristophanes and Lucian."

But I must not linger longer here. A thousand years pass, and there comes another period of literary culture, with one towering light set in a diadem of flowers. That towering light is the great Italian master, Dante. What! Can our children find anything to interest them in Dante? Why, I have never been able to interest myself in Dante, says one. All of which may be true, friends, and yet, I have the audacity to stand before you to-day, with the assertion, that the "Divine Comedy" with its threefold divisions, the Inferno, Purgatorio, and Paradiso, each ending with its hand uplifted toward the stars, can be made very attractive to children from the sixth grade up. It is a wonderful work, well worthy its name, full of power and beauty. It is work of the most finished art, wrought by a skillful hand. It covers the whole field of poetic imagination — from the most grotesque and horrible in the Inferno, through mediocy in Purgatorio, to the most beautiful of which the mind can conceive in the Paradiso. It is full of profound and misty sayings; full of double meanings and dark utterance; a work for profound and scholarly minds, and yet, withal, full of ennobling thoughts and attractive scenes and lessons, which are entirely within the comprehension of our children. Let them taste these great thoughts. Let us give them a view of this great work of art. How vividly in our memory, is pictured the beautiful child Beatrice, in her crimson robe, as the boy Dante first met her. Of course his boyish heart went out to her. How chaste and sweet the young girl of eighteen, this time in robes of spotless white. Of course the impression made could never be effaced. Is it any wonder that this pure, sweet girl in her beauty of crimson and white became the inspiration of his life; that henceforth the burden of his thought was to place her where never woman was placed before, and to render her name immortal? That love never spoken, that early death, that silent life purpose, that strange, mysterious transformation, such as could be worked out only by a mind like Dante's, of a beautiful soul, into the spirit of "philosophy" — how attractive to young and old.

The plan of Dante's Universe, with its "circles of hell," its

"rivers of death," its "clouds of fire," with its "Gate of St. Peter," its terraces of rest, and its terrestrial paradise, with its "Crystalline Spheres," its "Lake of Light," and its "Rose of the Blessed,"—what an interesting study. And then the journey, through the "dark woods," with its "beasts of terror," led by Virgil, over the "dark river," oared by the grim Ferryman, down through the horrors of hell, up through the peaceful regions of waiting and purging, into the revolving heavens, sphere by sphere, led by the beatific light from the radiant face of Beatrice, into the celestial glories of the "Empyrean,"—what soul so dead that it will not be quickened by such power of description, such wonderful imagery. And then the literary gems fairly sparkle, in their beauty and brilliancy, along the way. From the inscription over Hell Gate:

"Leave off all hope all ye who enter in," through the description at the Gate of St. Peter:

> "Thither did we approach; and the first stair
> Was marble white, so polished and so smooth,
> I mirrored myself therein as I appear.
> The second, tinct of deeper hue than perse,
> Was of a calcined and uneven stone,
> Cracked all asunder, lengthwise and across.
> The third, that uppermost rests massively,
> Porphyry, seemed to me, of flaming red
> As blood, that from a vein is spurting forth.
> Both of his feet was holding upon this
> The angel of God, upon the threshold seated
> Which seemed to me a stone of diamond."

Through the "Salute of love," and the "Bees" with radiant form, wings of gold, and robes whiter than snow, and the "snow-white rose," the yellow center of which is a lake of light, and whose circumference would outgirt the sun.

> "And Light I saw in fashion of a river
> Fulvid with its effulgence 'twixt two banks,
> Depicted with an admirable Spring.
> Out of this river issued living sparks
> And all the sides sank down into the flowers.
> Like unto rubies that are set in gold."

Who shall say that all this is not of interest to our school children? Let us see that they have opportunity, through us, to know something of this great work. Give them a taste, and I am sure they will in time desire to peruse and study the entire poem.

Probably the most sublime poem ever written, is Milton's "Paradise Lost." I would that time would permit me to speak of its features that I have found attractive to our older children. They are there, friends; an "Undisturbed song of sweet repose," that only needs to be awakened from its slumbers and placed upon our banquet table. I would also that I had time to speak of the works of Chaucer, Goethe, and Schiller. These two have a place among the young.

But, says someone, these studies are not American, and we could study with greater profit our American authors. What is American Literature? Is Longfellow an American author? "The windows of Longfellow," says Horace Scudder. "look towards the east." Emerson? — "To understand Emerson, one must have a remote view" —says the same author: "Emerson gathered his best thoughts from Epictetus and Marcus Aurelius." Hawthorne? — Why, our greatest prose writer of modern times gathered his inspiration and received his pure classical style from teachers thousands of years old. What student of Hawthorne can doubt it? There are few purely American authors. As it has taken the accumulated experience, wisdom and knowledge of all past ages to make this hour in America, so it has taken the literature of all the past and of all nations to make American literature. Then, finally, looking backward into the ages past, and outward to all nations, let us present to our children the pure and strong in our own literature.

Where shall this work be done? In connection with all studies — science, history, geography, wherever there is a suggestion in nature. The spider will suggest the story of "Arachne;" the Sunflower, "Clytie;" the Orange, "The Golden Apple;" the Air, "Athena;" the Wind, "Hermes;" the Poplar Trees, the Story of "Phaeton," the "Suicides" in Dante, Lowell's "Singing Leaves," and Tennyson's "Talking Oak;" and so almost everything points to some literary gem or ancient story, which may, with the authors studied, be woven into a perfect whole — a beautiful picture to be hung in memory's halls, to shape the character, beautify the life and be a joy forever.

But, chiefly, this work must be done in connection with daily language lessons. A slight experience tells me that by following this plan, our children will in a short time gain a command over their mother tongue, such as they can obtain in no other way.

But, friends, I have already detained you too long. I am aware that I have touched but the border land of this subject. Underneath the surface is a wealth of beauty and grandeur, of which we have not dreamed. Let us take up this work and search for hidden treasures. We shall be sure to find, when the dust shall have been removed, rare and costly jewels, which, purified and softened by christianity, may be made to sparkle in the light of modern thought. Let us take these jewels, use them discriminately and wisely, until our young people shall appreciate the beautiful in literature, as now they do the beautiful in art, or the classical in music, and let us not forget as we strike the chords of literature upon the delicate harp of young lives, that

> "The tones, the living tones,
> Are left forever in the strings."

HARD ON HERO WORSHIP.

THERE is a story told of one of Tennyson's devout American admirers who followed the British laureate about for half a day to catch some sentence from his immortal lips which he could treasure up and repeat to his children as having come to him direct from his idol. After long and patient waiting he was rewarded by hearing the poet say to his companion: "You care for the children while I go and get a glass of beer."

This story has its parallel in the case of an inquisitive admirer of a prominent American writer, who was anxious to learn something of the methods and details of work of his ideal. Finding occasion, he one day accosted the author's servant with: "Your master is a great literary light, Mary."

"Sure, an' he is that," was the intelligent response.

Scarcely able to control his surprise, the detail hunter continued: "And you doubtless have opportunities for observing, Mary, something of the methods by which he gathers material for and makes his stories."

"Makes his stories, is it?" gruffly answered the girl. "Faith and its little making they take: they come to him natural like."

"I knew that," interrupted the delighted questioner, feeling that he was now getting on track of what he wanted; "but can you tell me just how he begins to work at one, now?"

"Goes to worruk? It's before he goes to worruk, he comes into the breakfast room, he does ——"

"Go on, that 's just what I want; here 's half a dollar for you."

"And he says, says he, 'Mary, I 'll be afther paying you your wages on the morrow;' but niver a cent does he pay. That 's the way he 's afther tellin' his stories." J. F. C.

EDITORIAL.

A DISTINGUISHED professor, whose life had been divided between college instruction for girls and boys, was accustomed to formulate his experience somewhat in this wise: "In a week, I can wind up a class of college girls in science work to a furor of enthusiasm, so that the average student will work within an inch of her life, and even the most trifling girls will flare up with a new excitement. A similar class of boys will jog along in a not very satisfactory way till, some day, a sleepy fellow, off in the corner of the room, will wake up and ask a question which reveals him as a born expert." This seems to be only another way of saying that, after all the protest from the women's colleges, there is something which, for want of a better name, may be called "Sex in Education." Whether from the original make-up of our double-sided, mysterious human nature, or from some of the marvelous tricks of evolution, which make that "potency" more inexplicable than the Almighty himself, there would seem to be this notable difference in the way that the man or woman of similar capacity goes to work in earnest to do anything. Either, from an original coarseness of the material in his nature, or from the habit caught by generations of doing many things at a time, even the ablest and most absorbed man seems always to have a considerable margin of fallow-ground outside his realm of cultivation. Into that wilderness he can retire, either as sportsman, athlete, lounger, or what-not, for the time putting off the weightiest responsibilities or the most harassing trials, and return refreshed and ready for better work. The most ambitious male student in college seems always to have his eye out for a back door through which he can "skip" when the pressure is too hard. The boys that are destroyed by overwork in college are invariably of the fine-grain, feminine type, who cannot be interested in this outside life of their companions. The girl, whether studious by nature, or otherwise, is always in peril of an over-mastering and dominating interest that wholly absorbs her life, and for the time leaves no margin beyond its horizon. The superior types of womankind, whether in religion, culture or art, seem instinctively to take on this attribute of absolute consecration to the uppermost idea. In society, in business, in public administration as far as we have the experience, the same tendency to absolute absorption invariably appears. The effect of this is very marked to every close observer of the higher university for girls. It

may be that the health of the upper strata of students in Vassar, Wellesley and similar schools, while in college, is in no special way more affected than the physical condition of the similar strata of boys in Harvard or Yale. The difference seems to be that the graduate of the woman's college leaves her Alma-Mater with a fixed habit of intensity which is apt to become a confirmed habit the longer she remains in any occupation connected with educational work. Without sleepless vigilance in overlooking the suburbs of her own nature, she becomes more and more a devotee, losing interest in society, often indifferent to her own physical well-being, burning up with the fire of her own consecration. At fifty the man, with ordinary care of himself, is on the threshold of his grandest achievements, while his sister, in the vast majority of cases — is laid on the shelf, or working with the remains of exhausted mental and bodily vitality. It does not exactly touch the point to ascribe this to the environment, social, physical, or what-not, of the woman student. If you put her at gymnastics, the same thing happens. If you awaken a real interest, she is apt to lash herself into the imitation young man, now somewhat fashionable, who goes about, clad like her brother from the waist up; a boy in everything excepting — that she is a girl. We are compelled in the last analysis to recognize this radical difference in the manner in which the two classes of earnest and ambitious students go to work in the higher education, and adjust our methods according to the wise and benevolent ordering of Nature.

THE warning from this experience would seem to be, that our really superior schools for girls, which have done playing with and gone seriously to work about the higher education, should revise the curriculum, and insist on a more limited range of subjects than they now indulge in. Even were it not for this constitutional habit of the girl student, the previous training of the vast majority of American girls would furnish this caution. The attempt to drive the girls' college, four-in-hand, with a crowded curriculum, with the inevitable excitement of the Music and Art department, becomes a two-edged sword of destruction. With the lower two-thirds, it simply sets the mind of the girl bubbling in half a dozen directions, the enthusiasm of to-day swallowed up in the craze of to-morrow, until she graduates in the condition of disheveled mentality and moral restlessness in which we find multitudes of American young women, ready to be caught up by any one of the social, philanthropic, religious, or more perilous crazes that ravage American society. The remaining third, who come for serious study, are almost invariably damaged in body by over-intensity; or more fatally graduated into the state of permanent fixed

idealism, which makes so many of the noblest women in the land something a little off from common humanity, — too often nearing the perilous brink of mental collapse. The ideal higher school for girls will draw more sparingly on this treasury of divine enthusiasm, demand a longer period of better graded study, and surround the entire course with a physical, social and commonplace human environment, that will be a foil to the danger we have indicated. In this way lies, to our mind, the only probability of avoiding a reaction of educational sentiment; and here seems to us the path marked out by Providence along which the American girl can walk upward towards that peculiar culture which alone can assure her real equality of power and influence in the building of the New Republic.

THE word comes that the managers of the Republican party in Illinois are considering the propriety of throwing over the issue of the compulsory education law on which Dr. Edwards, their candidate for the State Superintendency of Instruction, was defeated at a recent election, and going into the presidential campaign with no such perilous burden as the welfare of the children upon the shoulders of the party. The time will come when it will need all the oratory about Thomas Jefferson and Andrew Jackson, plus the good reputation of Grover Cleveland, to redeem the Democratic party leaders of Wisconsin and Illinois for their unholy alliance with the Catholic and Lutheran priesthoods in their ecclesiastical crusade against the common school, the English language and American citizenship. In long-range politics, in any state of this Union the one thing no political party management can afford to do is to turn the back of the party they represent upon the children, and even postpone for a season the sacred cause of universal education, "by the people and for the people," to a temporary partisan success. The educational missionary through the Southern States is always in sight of the tomb-stone of some promising politician, now politically dead and buried because he thought it safe, in some emergency, to vote against the most sacred interest of the New South — the thorough education of its children and youth. So it has turned out, especially in New York, where every politician, however famous, who has yielded to the importunity or been awed by the threats of a priesthood bent on destroying the common school, has been buried so deep that only the resurrection trump will reveal the place where he lies. The one established factor in American statesmanship is the fundamental principle, gravely and gradually formed and firmly held; that the American system of training for American citizenship in the improved modern American common school, underlies every other issue now up for political discussion. Unless the coming twenty mil-

lions of young America, within twenty years, can be found with a broader public intelligence, a sounder public morality, and a more intense and comprehensive patriotism than now prevails it will be of no avail that this year we decide the open questions of suffrage, finance, tariff, prohibition, labor and what-not. In every case the decision will be partisan and partial, failing to express that "sober second thought" of the people, which abides in the national policy. The one condition of success in solving any vexed question in this Republic, is that, all the time, in the basement-story, the great educational furnace shall be kept going that makes the house above a habitable and fit place for the family to live in while coming to an agreement on anything and everything concerning the general good. And the party leader or party, ecclesiastical, political, industrial or social, that for any consideration slackens the fire below and puts out the light and warmth of universal educatian in the coming generation, must answer for it before that august tribunal of an awakened public opinion and conscience which is the supreme court in national affairs.

THE HON. JAMES G. BLAINE has done one of the best things in his notable life in writing the lately published letter addressed to the New York priest who married his scape-grace son to a scheming ambitious young woman, evidently his senior, with no real attempt to learn the situation of affairs, or put himself in communication with the parents of the run-away couple. The silly and generally wicked escapade of elopement by precocious children on the wire-edge of manhood and womanhood, or the habit of hasty marriage in defiance of parental judgment and often of social propriety and refined morality, is one of the most fruitful causes of the national demoralization we call "easy divorce." A great check could be given to this folly if the clergy, as a body, would consider it a point of professional honor, not to say *morality*, to refuse to join such people in what is anything but "holy matrimony." But to the shame of the profession it must be said, that there seems to be no difficulty in any community or sect in finding a parson, or priest, ready and willing to lend his hand to an act that is always an indiscretion, and generally an outrage. Mr. Blaine never used his marvelous rhetorical power to better effect than in the stinging epistle in which he trounces the priest aforesaid with an ominous whirl of the scourge towards the back of the archbishop who gave his hasty consent to the marriage of a scheming and ambitious young Catholic woman, said to be twenty-two, with the bad Protestant boy — son of a famous public man — at the age of eighteen. If every clergyman in the Union would "read, ponder and inwardly digest" this letter, with its accompanying history of another social wreck, it

might solemnize the clerical mind in a direction where looseness is too often apparent. If this style of getting together is to go on, leave it to the Tammany justice, or the free and easy country squire to preside at the ceremony and shoulder the reaction of indignation that inevitably comes back on the agent of such an accomplishment.

IT is a good sign of the times that the three hundredth anniversary of the birth of John Amos Comenius receives such wide-spread attention throughout our country. The echoes of the notable meeting of superintendents at Brooklyn roll westward to the sea, while from California echoes roll eastward of honors paid there to the great Moravian instructor. This latter meeting was at Pasadena, on March 5, under the able direction of Supt. Will S. Monroe. Prin. Caspar W. Hodson presented the facts in the long life of this early educational reformer, and Mr. Munroe read letters from distinguished educators in Europe as well as America in honor of Comenius. Great thoughts and noble deeds live on. In distant lands and after centuries the memory of the obscure but gifted teacher is venerated. Comenius deserves these tardy honors. We believe Pres. G. Stanley Hall does not overstate the merits of his subject when he says: —

"I regard the reforms of Comenius, together with those of Pestalozzi, as the most important in the history of education. Comenius made the Baconian method bear its precious fruit in the school. Every teacher should read the 'Orbis Pictus.' Primer though it be, it sheds a broad light on the whole field of education."

THE friends of the Indian increase in number. We are learning more and more to realize his intellectual and spiritual worth. Under his dusky skin beats a heart which can be touched, a mind which can be educated and a soul which should be saved. Carlisle and Hampton are object lessons for the Nation. The thirst for good literature increases rapidly among the Indian youth who have learned to read. But many of them cannot supply themselves with the reading they ought to have. To meet this need the Woman's National Indian Association, about two years ago, formed an Indian Library Department. The well-known writer, Miss Frances C. Sparhawk of Newton Centre, Mass., is at the head of this committee, and her last report shows much excellent work done. The receipts for the year ending in November, 1891, aggregate $1,274.72. The main things needed are good, fresh books and magazines; or, money to buy and send these. This work deserves hearty support. If any of our subscribers desire to send us money for that purpose, we will furnish copies of EDUCATION to Indian schools at half the regular price.

THE season for summer schools is approaching and preparations are under way to make them better than ever. The sixteenth session of the Amherst Summer School, under the brilliant direction of Prof. William L. Montague, will open at Amherst College, on Monday, July 4th, and will continue five weeks. Instruction will be given in French, German, Italian, Latin, Greek syntax and English literature. The classes meet in the commodious lecture-rooms of the college. If one wishes to combine the classic associations of a college town, the beauty and healthfulness of the Berkshire hills, and the advantages of a great library with superior instruction, let him become a member of this summer school.

IF one prefers the sea to the hills, let him go down to Martha's Vineyard and attend the great Summer Institute which is so grandly successful under the strong leadership of that veteran in educational journalism and instruction, Dr. William A. Mowry. Ably assisted by Messrs. Meleney of Somerville and Edson of Worcester, he has placed Martha's Vineyard at the very head of all the summer schools. If one wishes to study French and German by the natural method, let him go to Exeter, N. H., to which classic town Dr. L. Sauveur has removed his summer school from Burlington, Vt. Here, in a few weeks, one may rub up his rusty knowledge of other tongues, and get well started in a course which will lead him not only to comprehend but to speak them. Between these and the various other summer schools, — together with the great meeting at Saratoga — our teachers will have no difficulty in so planning their vacations as both to refresh the body and cultivate the mind.

SUPT. SAMUEL T. DUTTON, Secretary of the committee appointed by the Massachusetts Commission for the World's Columbian Exposition, asks the coöperation of the teachers of the state in collecting and organizing an exhibit of the public school system of the commonwealth. He believes that all school committees and educators feel a patriotic desire, first, that, as a nation, the United States may make an exhibit of her educational system that shall be creditable in the eyes of visitors from abroad; and second, that Massachusetts may fully maintain her historic reputation for the excellence of her free schools. Dr. Selim H. Peabody, the Director of the Department of Liberal Arts at the coming Exposition, has met in conference with this committee recently, and explained that the limitations in respect to space are such that cities and towns cannot expect to make separate exhibits; but, while the exhibit from each state is to appear as a unit, and will be installed under the head of the several departments of primary,

grammar, etc., known in our school system, all products of school work may be so marked as to indicate the town and school from which they come. Results in special lines, as manual training, kindergarten, etc., will be shown separately. Mr. Dutton adds: "A circular of full information respecting the nature and classification of the exhibit will be ready for mailing at an early date. This will doubtless be followed by other circulars calling for particular school products and giving full direction as to their preparation. The active assistance of school committees is especially desired; and it would facilitate the work if one person in each town and city could be authorized to correspond with us and assist in promoting the object in hand. You are cordially invited to communicate with the committee, and to offer such suggestions concerning the exhibit as will, in your opinion, tend to secure the most satisfactory result." What is here being requested for Massachusetts is doubtless being requested for other states. The West is wide awake in this matter, and the combined result should be such an exhibit at Chicago as shall honor the educational work and workers of our land.

THE Southern Educational Association promises to be a great and enthusiastic meeting this season. The third annual session will be held at Atlanta, Ga., on July 6–8, in the capitol. Dr. Wm. T. Harris, Dr. J. L. M. Curry, and a great company of the notable educators of the South are to be present. Pres. E. B. Smith of the State Association promises that one thousand of the best teachers of Georgia will attend this meeting, while five hundred are expected from North Carolina and large delegations from all the other southern states. We note their early enthusiasm with great satisfaction, and hope that their high expectations will be fully met.

CORRESPONDENCE.

To the Editor of EDUCATION: —

The cry is now, Improve the Grammar Schools. The alarm was first made in New England and is fast spreading over the entire country. It was made by those in charge of schools higher in grade than the grammar schools and the reputation and fame of the men who first sounded the note is so great, the sound is so extensive in volume, that the faint replies in opposition are unheeded, and we might think there was but one opinion on this serious question. So vigorous are the outspoken champions of the new desire that I sometimes fancy there is little honesty in their claims. The story they tell of the terrible evils

resulting from our present grammar school course is to me, a teacher of some years' experience, "a tale full of sound and fury, signifying nothing." I believe that those who are engaged in the actual work of teaching in grammar schools are qualified to judge somewhat of the worth of the course of study which they interpret, and I have yet to find a grammar teacher of any standing or reputation who is in accord with the new movement for change. The advocates are college presidents, high school teachers, and an occasional superintendent. They stoutly maintain that there is something entirely wrong in the present curriculum — strange that it should have been discovered all at once and by such eminent men — and they urge, nay they demand, that a change shall be made, a change which is so radical and sweeping in its nature and provisions as to threaten the entire stability of the grammar school. Curricula are not made in a day. The present grammar school course of study, practically the same in every state in the Union, is the result of the slow growth of years, and it has stood the test of time and the assaults of opponents. I fancy it will not surrender to the present sharp attack. When the attacking force shall have spent itself the friends of the grammar school will have little *debris* to sweep away, for sound and large words do not overthrow walls nor cast down the work of ages. The grammar schools have no cause for fear.

Boston. T. R. F.

FOREIGN NOTES.

Movements in Prussia. — The preliminary debate upon the Prussian Education Bill (noted in last months' EDUCATION) was terminated by referring the bill to a special commission. Among the many protests against the measure was one from the University of Berlin signed by sixty-nine out of the eighty-two professors, and one from Breslau signed by fifty-three professors. Halle also sent an opposing petition. The excitement occasioned by this measure had scarcely subsided when the storm broke out afresh over the Emperor's speech at the banquet of the Brandenburg Diet. In this speech he characterizes those who oppose his will as grumblers, and advises them one and all to shake the dust of Germany from their feet as soon as possible. It seems now to be universally felt that the struggle between the Emperor and the ever-growing Opposition will be fought out to the end. The correspondent of the *London Times* says: "The ministers find themselves to-day in the presence of a united opposition, National Liberals, Radicals and Socialists, and the government is delivered bound hand and foot into the hands of the Catholic party." The 27th Article of the Prussian

Constitution is everywhere quoted in response to the Emperor's arbitrary words, "Every Prussian has the right to express his opinion in speech, writing, print, or in pictorial form." It is probable now that the Education Bill will be pushed through the legislature and give occasion for final demonstrations.

New measures relative to Secondary Schools in Germany and France. — The London *Journal of Education* in its issue for March publishes a valuable analysis of the new statutes for Prussian Secondary Schools. The former statutes have prevailed just a decade, having been promulgated in 1882. The chief alterations made in the present regulations are thus summarized: —

(1) General decrease in the school hours, and increased attention to the bodily development of the pupils.

(2) Decreased attention to Latin and Greek.

(3) Increased attention to modern languages (English and French.)

(4) Adoption of the analytical method for classical as well as for modern languages, in the place of the synthetical.

(5) Increased study of the national language and history.

In the language of the statute, "German occupies now, even more than before, the centre-point of all education; and no student can obtain a leaving certificate of merit without satisfying the examiners in all that is required in German."

The new statutes come into force in the school year 1892–93.

The drift of the movement in respect to secondary studies in Germany offers points both of likeness and contrast to that which has taken place in France. In the latter country, as in the former, the number of class hours a week has been reduced in a decade. In 1880 they ranged from 20 to 25; in 1890 from 20 to 20.5. Latin and Greek have gained decidedly during the decade, although they show a slight falling off in the higher classes since 1885. The time thus saved has gone not to the advantage of the mother tongue as in Germany but to drawing.

The time given to French has been diminished in the upper classes, but this has been very nearly balanced by the increase of time in the lower classes. Considering the entire course leading to the degree of Bachelor of Letters, the distribution of time among the several subjects is as follows: Letters, including Latin, Greek, and French, 62.53 per cent.; English or German, 8.25; history and geography, 12.34; science, 8.65; drawing, 8.23.

Among the modifications recently made in the French programmes, those relating to the special secondary course in the lycées established in 1865 under the lead of Mr. Duruy are the most important. This course created in the interests of young men destined for commercial,

agricultural, or other industrial careers has been gradually losing its special character. By decree of June 4, 1891, the name was changed to modern secondary course. The programmes were strengthened on the line of French language and literature and modern foreign languages. Of the latter German is obligatory, the second may be English, Italian, or Spanish. The succession of grammatical exercises and the choice and sequence of works for reading and explanation, as set forth in the programmes, make up a very suggestive outline of study. The classics are still as heretofore excluded from the course, but an expedient has been devised for putting the students of this course in possession of those classical ideals and conceptions which enter so largely into the mental structure of modern nations. This expedient is a course of ancient authors for interpretation and analysis by the professors who must be thoroughly familiar with the original. The modern course covers six years and leads to the degree of "bachelor of modern secondary instruction."

The Crisis in France. — The recent modifications of secondary education were so largely the work of M. Bourgeois, Minister of Education, that much excitement was occasioned in educational circles by the unexpected fall of the French cabinet. Fortunately for these experiments, M. Bourgeois retains his portfolio in the new cabinet formed with M. Loubet as Premier and Minister of the Interior. The change of ministry was the outcome of the difficulties between the government and the Catholics. The Radicals accused the government of lukewarmness in dealing with the enemies of republicanism. In self defense the government endeavored to force the bill for excluding religious brotherhoods which was a revival of the vigorous measures carried by Jules Ferry in 1884. The unexpected combination of clericals and radicals against the measure caused the resignation of the ministers. The radicals explain their action by the statement that the measure was not drastic enough, but it is probable that personal motives were at the bottom.

Secondary Schools of Greece. — The present provision for secondary instruction in Greece is interesting, especially in view of the movements in Germany and France. The schools are of two orders, gymnasia of which there are thirty-five with an attendance of about 4,714 pupils and a staff of 240 professors, and "Greek schools," 282 in number, with an attendance of 15,351. These institutions are recognized by the state but not supported by it, their chief source of income being free gifts. A small entrance fee of about sixty cents is charged. It should be observed that these schools have no boarding departments.

The seven classes of the secondary schools are comprised in two divisions of compulsory instruction. The programme of the first division — scientific education — includes Greek, French, English, German, history, geography, divinity, mathematics, natural history, physics and chemistry. Latin is excluded as the Greeks esteem the study of a dead language superfluous. The second division — technical education — embraces drawing, writing, gymnastics, and military drill. These schools are intermediate between elementary schools and the university. High intellectual culture is the province of the latter which is divided into four faculties, i. e., philosophy, theology, law and medicine. Philosophy, subdivided into sections for philology, physics, and mathematics has a staff of twenty-one professors and fourteen lecturers. About a third part of the students of the university belong to the provinces of the Ottoman Empire.

MISCELLANEOUS NOTES.

The Swiss system of education offers instruction at every point. It is particularly suggestive in respect to the treatment of teachers. In the large towns the schools generally comprise seven classes. All the teachers are on an equality. Each teacher has charge of one class (about fifty pupils) and is entirely responsible for it. All are personally responsible to the school director who is the local head of the schools. Salaries for male teachers in the country average $280 per annum, with house and garden, and in the towns, $480. Women receive $180 with house and garden in the country and $320 in the towns. There are elaborate provisions for pensions, and for increase of salary according to years of service.

One hundred and seventy-two towns in England have schools of science and art.

The Technical Schools Act, Scotland (1887), has borne little fruit as yet.

The Communal Council of Brussels has created special courses to prepare young women for the university.

Adelaide University, South Australia, is affiliated to Cambridge, England. A college has been established for women in connection with the University of Sydney, New South Wales. A. T. S.

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned.

Austin, Jane. *London Quarterly Review*, January. Account of her works and explanation of the high place given her in the literature of fiction. Her books are no more tedious than was the life she describes. Admired by Scott, detested by Charlotte Brontë.

Desert Fruit, A. Grant Allen. *Longmans'*, February. A description of the prickly pear, so abundant around the Mediterranean, but brought there from America.

Discipline and the Army. *New Review*, February. Long and systematic growth is necessary for military discipline, without which there can be no formidable army, but military discipline must be founded on national discipline.

Duke of Clarence. *New Review*, Feb. In the family of the Prince of Wales, mutual affection was very strong; the mother was always with the children, playing with or reading to them or superintending their studies. The life of the princes was not that of the fairy stories. The Duke and his brother, Prince George, lived two years as naval cadets and did all the duties of their place. The Duke spent two years as a student at Cambridge University.

Electrical Transmission of Power. Earle of Albemarle. *Ninteenth Century*, January. Several plants for transmitting the force of falling water are described. A much larger part of the power can be transferred much further by electricity than by steam, hydraulic force, or wire rope.

Elizabeth Stuart in Holland. Baroness S. I. de Zuylen de Nyevelt. *National Review*, March. The article opens with a comparison of her bridal trip through Holland and her return as the fugitive Queen of Bohemia. "History has on the whole been kind to her memory. The exiled widow, with her unruly household and perpetual debts, is well nigh forgotten; but the brave young queen, whose courage never failed in the face of danger, whose spirit was not daunted by misfortune, will never disappear from its pages."

Flight from the Fields, The. Arthur Gaye. *Macmillan's*, February. Want of work and dullness of life are chief causes of the migration from country to city. There is nothing to take the place of the frolics that have died out. Change of ownership of many estates breaks the bond between proprietor and tenant.

Friendship, An Eighteenth Century. Miss. I. A. Taylor. *Longmans'*, Feb. An account of the intimacy between Miss Inchbald and William Godwin, broken off so strangely by the lady upon his marriage.

Greek Ideas and Usages upon the Christian Church, The Influence of. Hibbert Lectures, 1888; by Edwin Hatch. Reviewed in *London Quarterly Review*, January. Dr. Hatch draws a sharp contrast between the Sermon on the Mount and the Nicene Creed. "The one belongs to a world of Syrian peasants, the other to a world of Greek philosophers." Criticism of this sharp separation of the Sermon and the Creed.

Irish Education Question, the. J. W. Russell. *Fortnightly*, February. "The result of capitation grants to schools with a minimum of twenty-five pupils has been that in towns where a flourishing national school was in existence, attended by all classes and creeds, and supporting capable teachers, the clergy — Roman Catholic and Protestant Episcopal — have set up denominational establishments for which they have received grants under the new rules. The central school has been depleted and starved, while the branch establishments are too small to secure really competent teachers." The writer charges Mr. Balfour with contemplating a sur-

render of education to Irish Clericalism. The appalling ignorance in housekeeping of Irish girls and the need of domestic economy in the schools are pointed out.

Literary Collaboration. Walter Besant. *New Review*, February. This method of partnership in writing novels may be well applied in story-telling, but not in character painting. The main advantage of partnership lies in the discussion of the plot and its situations, and the hammering out of all the effects of which they are capable.

Loyola and the early Jesuits. Stewart Rose. *London Quarterley Review*, January. The reviewer of this book says: "While the Protestantism of to-day looks back with thankfulness to the appearance of Luther on the stage of public life at such a stirring time, and sees the man come to the front just at the critical hour, the Roman Churchman, from his point of view, regards it as a remarkable providence that Loyola was raised up at that special nick of time."

Mandarin, The making of a. *London Quarterly Review*, Jan. "China is a land of contrasts. The Chinaman's mind is built in watertight compartments and he finds no difficulty in believing things mutually inconsistent, and acting on them at the same time. China is at once the most aristocratic and the most democratic, the most literary and the most ignorant, the most materialistic and the most superstitious of nations, the best governed in the East and yet the harbourer of great oppression and wrong."

Military Unreadiness, Our. *Macmillan's*, February. "There is not an officer of twenty years' service who is not perfectly well aware that the powers of endurance, the discipline, and the general fitness for war of the soldiers in our home battalions have deteriorated lamentably since he first joined the service. The spirit which has made the German and French armies is responsibility; each officer is held responsible for the training of the men under him."

Old age pensions. William Bode. *National Review*, March. Germany is sick of such pensioning; this should be a warning to England. Compulsion takes the place of charity. Labourers begin to be sick in order to draw a pension, so soon as wages are low.

Protection—Free Trade—Fair Trade—Colonial Trade. Earl Grey. *Nineteenth Century*, January. He opposes any attempt on the part of England at retaliation or arbitration, with the view to having tariffs in other countries lowered; this he calls an "infantile policy," calculated only to make others believe the more strongly in their tariffs.

Race across the Atlantic, the. Henry Dyer. *Scottish Review*, January. Giving a history of ocean steam navigation.

"Runawayes Eyes." J. W. Hales. *Longmans'*, February. On the passage in Romeo and Juliet containing this expression, and comparison with similar uses in other places.

Summer School of Philosophy, A. J. Clark Murray. *Scottish Review*, January. An account of this school in the Adirondacks.

Swedenborg and Modern Life. C. S. Boswell. *National Review*, March. "In many respects Swedenborg's doctrines bear a striking resemblance to the teachings of modern Theosophy. Both strenuously inculcate man's personal liberty and responsibility; both make the emancipation of man to depend upon the completeness with which he overcomes his self." Comparing Swedenborg and Dante,—"the angels and devils of Swedenborg are only the machinery employed for conveying his moral and philosophical lessons."

Teaching University for London. *Quarterly Review*, January. "The present plan for Albert University would only hinder a better plan in the future."

Vivisection. L. J. Wallace. *Westminster Review*, March. "Those who would prove that vivisection is practically useless have set themselves a hard task and show no little boldness; for they put themselves at once in opposition to that method by which science has won most of its triumphs, the method of experiment."

J. P.

MR. WOODBURY'S "TALKS WITH RALPH WALDO EMERSON."

F. A. COMSTOCK.

There are men of whom too many memories cannot be given, characters so rare that every light thrown, it matters not at what angle, reveals new charms. So we have to thank Mr. Woodbury for bringing Emerson once more before us, a living person. Much as the other memoirs have given, we find in these impressions of the sensitive, enthusiastic collegian, a presentation that we would not willingly miss.

The loving student of Emerson will dare to appropriate the beautiful sympathy which characterized his relations with the author, feeling it to be a gift too precious for the limits of time and place, rather to be shared by all earnest souls who find in his voice a trumpet call. Of especial interest are the sayings of Emerson himself, which the young hero-worshipper committed to paper, treasured through the years, and now gives us. The philosophy of Emerson's style is contained in some of the utterances on expression: —

"The most interesting writing is that which does not quite satisfy the reader. Try and leave a little thinking for him; that will be better for both. The trouble with most writers is, they spread too thin. . . . . Avoid adjectives. Let the noun do the work."

Of reading he says: "Learn to divine books, to *feel* those that you want without wasting much time over them. . . . . Learn how to tell from the beginnings of the chapters and from glimpses of the sentences whether you need to read them entirely through. Recollect you read only to start your own team."

These sentences might belong in Self-Reliance: — "So you cannot make too much of yourself. It is all there is of you. How many do you know who are made up mainly of fragments of others? . . . . Yield not one inch to all the forces which conspire to make you an echo. . . . . Live in a clean and clear loyalty to your own affair. Do not let another's, no matter how attractive, tempt you away."

The Hawthorne episode is full of meaning, and we like to linger over it; Emerson strongly declaiming against sadness in literature, rejecting morbid unhealthiness of any and every sort with the whole force of his nature, the young student sorrowfully confessing that he could not accept the dictum without reserve, Emerson receiving the announcement with imperturbable serenity, merely saying that he did not wish disciples. What a lesson in courage and tolerance!

To all who have to do with the instruction of the young, the book will be deeply suggestive. It shows anew what a wonderful thing is the heart of youth, with its restless ambitions, its longing for truth, its instant recognition of nobility. It is another reminder that the strength of words is in the lips that utter them, that the most precious gift of the instructor's bestowing is his own character.

We cannot be too grateful to Mr. Woodbury for sentences like these: —

"His bearing and contact had the exquisite power of a moral nature which has never been impaired by a wilful transgression."

"Elevating is a weak word with which to describe the influence of his gentle serenity upon men; for even quite above themselves were they lifted by his presence, and found their highest moments his common ones."

"It was taken for granted as a basis of companionship with him that one was living in constant obedience to the demands of his highest nature."

It has been said, that Emerson lived on too ethereal levels. But the spirit which pervades his writings, imparting to them, despite their detached form, an indissoluble unity, could exist only as the outcome of a life like his. It is this inner breath which stirs us to new endeavor, which makes Emerson what he is. Any lower dwelling-place than the starry heights he knew could never have been the birthplace of such winged thoughts. This plan of improving Emerson by bringing him down from his heights, is like that of the ingenious critic, who thought Dickens and George Eliot would be vastly better reading if the moral element were omitted. Right and wrong are coming to be so confused that it is the fashion to call them by each other's names; there are those who would have us believe that a little comfortable sinning now and then is a positive gain to the character. This is dangerous ground. Let us remember the difference between black and white; and when the earth is blessed by a rare pearl by whose side common gems lose their whiteness, let us not try to make ourselves believe that a few ink-spots would improve it.

There are essayists and essayists. There is Emerson, with his message of life and strength; there are the lower sort, who say their little say, and with their wise prattlings of things small and great, fill many books, — cui bono? If these are eager to know why all their volumes weigh light against one golden page of the master, let them be sure it is for want of that stern virtue, that ethereal loftiness they would fain improve upon.

Poor mortals do not need the counsels of those who are no farther along in the way than themselves. We all know good is better than evil, fine than coarse, true than false. If in our weakness we continue to live lives at variance with our convictions, we want no prophet to tell us it is better so. We reject the lie with loathing. Only in so far as we fervently hold pure ideals and faithfully live them, can our words have help or healing.

We close Mr. Woodbury's volume with a sigh, finding it all too short, and feeling new reverence for a nature which inspired words like these: —

"It is because these memories and such unpermitted memories as these are so near the heart, because his volitions were so pure and his demeanor so lowly, that we return to these things; and, remembering him less as a man of unmatched originality, an unfailing fountain of delightful ideas, a moral genius of extraordinary insight and mastery, an architect of new horizons, a generative and elemental power even, than as an inheritance of the divine presence, think of him lastingly and lovingly with the Scripture, 'Some shall not sleep, but be changed.'"

AMONG THE BOOKS.

Edward A. Bowser, LL. D., professor of mathematics in Rutgers College, has added to his growing series of mathematical text-books an ACADEMIC ALGEBRA, designed for use in common and high schools and academies. Like all of Dr. Bowser's books much attention is given to explanations of principles and processes, but so abundant are the examples that to the captious there is little occasion for fault finding. Dr. Bowser has wisely eliminated some of the subjects usually considered in higher algebra, and which are but useless lumber, and has given the fullest consideration to those subjects which are of practical importance. To those giving the Academic a thorough examination it will be found to be a very satisfactory treatise and valuable for its explanations, arrangement, and new and numerous examples. Published by D. C. Heath & Co.

That which has stood the test of the class-room, not once only, but scores of times, needs no special pleading to secure for it favorable consideration from teachers. The lessons in STUDIES IN ENGLISH COMPOSITION, by Harriet L. Keeler, have the merit of growth in the class-room and are not lessons which the professional bookmaker would construct and like to see taught in the schools. Every lesson is a complete whole and presents to the teacher all that is necessary, by way of statement of facts, suggestions, and copious references, in teaching the various parts in English Composition. Miss Keeler has builded as she knew and brings to teachers a book rich in material and abundant in selections. Without reservation we must affirm that it is one of the best works on English composition offered for use in the schools. Published by Allyn & Bacon, Boston.

If the study of geometry is to be introduced into the grammar schools, the little work entitled EUCLID FOR BEGINNERS, by Rev. J. B. Lock, Fellow and Bursar of Caius College, Cambridge, will be found to meet the demands now made for an elementary work on geometry. The author has an excellent plan in the arrangement of his book, and the steps are so gradually taken that there can be no bewilderment to the pupil as he advances. It is one of the best elementary books on geometry that we have seen, and we commend it to the attention of all interested in the enrichment of the grammar school course. Published by Macmillan & Co.

We have received the first annual report of Dr. Wm. A. Mowry, Superintendent of Schools, in Salem, Mass. It is a model in its matter and manner. Every grade of school work is treated of in a philosophic yet practical manner and recommendations for increased facilities for securing the very best results are made. Especial attention is given to the needs of the primary school and the discussion of the value of the work done in this grade of the schools is a most valuable contribution to the literature of school reports. Dr. Mowry writes like one to the manner born, and his report is to be highly commended.

James E. Armstrong and James E. Norton, principals of high schools in Chicago, have prepared a LABORATORY MANUAL OF CHEMISTRY which is to be commended for its practical value, wide scope of experiments and convenience. Many of the experiments are new and will be found to fully illustrate the subject which they are designed to explain. Special experiments upon digestive ferments are given prepared under the direction of Mr. W. E. Danner, of the Chicago Union Stock Yards. Alternate pages are left blank upon which the pupil may write his notes in the laboratory at the time the experiment is performed. The manual is one of the best of its kind, and will secure prompt recognition from all teachers of chemistry. Published by the American Book Company.

Among the literary ladies of Boston and vicinity, Elizabeth Porter Gould holds an honorable place. Our readers will recall in past years her able articles on Daniel Webster, John Adams, and Robert College, as well as several thoughtful and interesting poems. Miss Gould has now gathered her poems into a dainty little volume with the pleasing title, STRAY PEBBLES FROM THE SHORES OF THOUGHT. In these two hundred and twenty pages are nearly a hundred brief poems of nature, of love, and of a miscellaneous character. There are also thirteen sonnets and as many poems of a lighter tone for the delectation of little nephews and nieces. The following titles will give an idea of the wide range of thought: To Walt Whitman, A True Vacation, On Jefferson Hill, Blossom Time, Among the Pines, Three Kisses, Absence, Longing, The Ocean's Moan, Shadowed Circles, She Knows, Heroes, Robert Browning, Limitations, To Phillips Brooks, Gethsemane, 'Chilla, Warren's Song, Dear Little Mac, A Little Brazilian. There is a great deal that is sweet, joyous, and comforting in this little volume. The author gathers many helpful messages from earth and sea and sky; from human love and trust and hope. Copies of this book may be obtained of Miss Gould, at Chelsea; or, of De Wolfe, Fiske & Co., Boston.

L. Prang & Co., of Boston, are the leading Fine Art Publishers of the country. They enjoy a most enviable reputation for the beauty, skill, and finish of their Christmas and Easter cards, books and booklets. They deserve the great popular favor they steadily receive because they never rest on well-earned laurels but are constantly devising new things to cheer and charm us. There is a bewildering variety this spring of crosses, scripture texts, cards, books, pictures, booklets, and exquisite hand work on satin. Many of the designs are rich and very pleasing to the eye, and there is a great deal of elaborate ornamentation. This firm are educators of a noble type, and are constantly elevating the art standards of the whole nation. Wherever these cards and booklets go life is sweeter, brighter, nobler. Honor and thanks and success in increasing measure to L. Prang & Co.

Hannah A. Davidson's REFERENCE HISTORY OF THE UNITED STATES, published by Ginn & Company, Boston, is designed to assist pupils in using a library. The author gives a series of topics on important events in American history with references to books where information may be obtained. The appendix contains some valuable matter, as the Articles of Confederation, the Treaty of 1783, Lincoln's Inaugural Address, and notes on the resources of the colonies during the Revolution. The book will be very useful to all students of American history.

Margaret K. Smith, of Oswego Normal School, has translated from the German Johann Friedrich Herbart's PSYCHOLOGY and it is the latest volume issued in the now famous International Educational Series (D. Appleton & Co.) The Herbartian theories have stood the test of time and are now pretty generally accepted by pedagogical psychologists. In this book the attempt is made to found the science of psychology on experience, metaphysics, and mathematics, and in arrangement the book is admirably suited for use in the class-room or a text-book. By its use in Academies and Normal Schools, students preparing themselves to become teachers will have a thorough knowledge of the principle of psychology and their application to the work of teaching. Dr. Wm. T. Harris, in the editor's preface, gives a learned and valuable commentary on Herbart's system.

Nearly all number work done in the primary school is performed on the slate, the pupil copying the problems from the blackboard. Books on numbers are rarely given children in the primary grade, and it follows that the power to make quick combinations with numbers is rarely developed in children during their first three years at school. Why primary schools are not supplied with number books is one of the unsolved problems, unless we admit that hitherto the kind of books for this work has not been such as finds favor with either teacher or school officer. To remedy this serious defect in the early education of children, Mr. Charles E. White, Principal of Franklin School, Syracuse, N. Y., has prepared a work entitled NUMBER LESSONS. It is designed for second and third year pupils and is to be put into the hands of the pupil at the beginning of the second year, or when they have mastered all combinations to 10, and is to be used for two years. The first chapter develops numbers from 10 to 20; the second from 20 to 40; the third from 40 to 100; and the fourth deals with numbers of 100's and 1000's. The book contains several theses and problems, all carefully selected and arranged. The sets of problems are carefully graded and are for sight, oral, and slate work. Every primary teacher should examine this number book. Published by D. C. Heath & Co.

The science of education is becoming better understood every year, and its serious study is made by more teachers than ever before. It is now not enough for a teacher to have passed successfully the examinations necessary to secure a certificate to teach, a knowledge of the history and science of education is required if true success would wait on the teachers' endeavors. Most of the efforts made to give a succinct history of education and the science of it have been hitherto of so cumbersome a nature and form as to defeat the purpose designed by their makers. What has long been needed is a brief, suggestive and concise account of the history and science of education, written in a style and language which will make it suitable for institutes, normal schools, reading circles, and general use. Just such a work has been prepared by Mr. William J. Shoup, M. S., under the title of HISTORY AND SCIENCE OF EDUCATION. Mr. Shoup understands his subject well and deals with its different phases with excellent skill and judgment. The first part of his book deals with the science of education, and short chapters treat of empiricism, development of the mental and moral faculties, the objective period of life, the kindergarten system, the different stages of intellectual development, the inductive and deductive methods in teaching, etc. In these chapters the teacher will find just the information respecting his work and its principles that he most desires to have, and there is nothing told that does not relate to the teacher, his work and his pupils. The second part of the book treats of the history of education from the antedeluvian world to the present time. It is one of the most terse yet comprehensive and complete histories of education obtainable by teachers. The work must appeal strongly to teachers and its use must, we think, become extensive. Published by the American Book Company.

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

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NOTES ON THE UNIVERSITY OF OXFORD.

BY ARTHUR INKERSLEY, B. A., LATE SCHOLAR OF BRASENOSE COLLEGE.

IT not infrequently happens, especially in "Summer Term," that an undergraduate of the University of Oxford is asked by a stranger from the country if he will kindly shew him the University. Now it is no more possible to point out to a visitor the University of Oxford than it is to exhibit a geometrial point. It is an abstraction, and is made up of all the colleges and halls which compose it. It has, of course, certain officials; and scattered throughout the city of Oxford there are various buildings devoted to university purposes, but even all these buildings taken together (and it is impossible to include them all in one view except from the top of Magdalen tower, the dome of the Radclyffe library, or some similar point of vantage) do not comprise the university.

The University until a few years ago consisted of nineteen colleges and five halls, the difference between a college and a hall being that the former has Fellows, while the latter has none. A college consists of a head, variously named Rector, President, Provost, Dean, or Master, and a certain number of Fellows and scholars. A college is a *Societas*, of which the Fellows are *socii*. The head and Fellows are the governing body of the college, while the scholars are undergraduate members who in consideration of their ability and attainments receive emoluments from the college. About 1870 a new college, Keble College, was founded

in memory of John Keble, the author of the "Christian Year." About the same time one of the old halls, Magdalen Hall, was raised to the dignity of a college, so that there are now twenty-one colleges and four halls. The halls are New Inn Hall, St. Edmund's Hall, St. Alban's Hall, and St. Mary's Hall; the colloquial names for which are "the Tavern," "Teddy's," "Stubbins," and "Skimmery." The men who choose a hall in preference to a college are usually induced to do so either by the offer of some scholarship or exhibition, or by the hope of curtailing their expenses, life at a hall being more economical than at a college. "Stubbins" and "the Tavern" derive most of their undergraduates from the ranks of men whose habits do not quite conform to the disciplinary rules of a college, which are stricter than those of a hall. Quite recently the Nonconformists of England, desiring to avail themselves of the culture of Oxford, have founded and endowed Mansfield Hall, for the reception of students belonging to the various Dissenting bodies.

Each of the colleges, while it resembles the rest in most respects, and is equally an integral part of the University, has some special reputation of its own. The oldest college is University College, which was founded in the ninth century, and revived in the thirteenth. But the largest, wealthiest and most famous college is Christ Church, usually called by its own men, the "House," the Latin name for it being *Aedes Christi*, the House of Christ. This was founded by the great Cardinal Wolsey, and fostered by his royal master Henry VIII. More distinguished names are to be found upon its "books" than upon those of any other one college. This is of course partly due to the fact that very many of the students are men of high birth, great wealth and influential connections, so that their entrance into, and advancement in, public life is much facilitated. Out of a recent Gladstonian cabinet of thirteen members no fewer than six, including the Premier, came from this one college, six of the others being members of an equally distinguished college at the University of Cambridge, Trinity college: while the last, the Right Hon. Joseph Chamberlain, M. P., had been at none of the great "public schools," nor at either of the universities. It may be remarked here that, in the estimation of a very large number of people in England, there are but two universities — Oxford and Cambridge. Of course there are universities at Durham, London, Manchester, Dublin,

Glasgow, Edinburgh, and St. Andrews; but if a man of social position or wealth goes to an English university at all, he must, if he can by any means get through the entrance examination, be a student — or at least a member — of one or other of these two.

The University, as has been said, has some special officials, of whose functions it may be well to give a short account. First comes the Chancellor, who is usually some very distinguished man, such as the first Duke of Wellington, or the present Marquis of Salisbury. He takes no practical part in the government; which is actually in the hands of the Vice-Chancellor, who is chosen, according to a certain rotation, from the heads of colleges. The Vice-Chancellor holds office for four years, and possesses some very curious powers, which not infrequently bring him into conflict with the mayor, the municipal authorities, and the local board of the city. He presides in a court called the Vice-Cancellor's Court, into which members of the University are summoned for misconduct, disturbance, breach of university rules, or debt; ordinary local or county courts having no authority over members of the University in these matters. He also exercises in Oxford the power which the Lord Chamberlain possesses in London, of licensing public performances or exhibitions. No conjurer, mesmerist, thought-reader, hypnotist, or theatrical manager, can perform in Oxford without first obtaining the leave of the Vice-Chancellor. He can also order people whose presence he deems undesirable in the city to leave it. His permission is usually granted to all performances except such as require troupes of actresses or ballet girls, whose presence is thought to be dangerous during term-time.

The University still retains its ancient rights of ward and watch over its members by means of its Proctors, who possess very important powers. The disputes constantly arising between the city and the university authorities were to some extent set at rest by an arrangement that the city should have the watch by day, and the university by night. The Proctors have a good deal of patronage in their hands, for they appoint from among the tutors and Fellows of the colleges the examiners for the various university examinations. A college may hold whatever examinations it pleases within its own walls, and among its own members, but all examinations for honors or for degrees are conducted by the university. The Proctors also parade the streets after dark, being

then accompanied by marshals, who are irreverently termed "bull-dogs." There are two Proctors, a senior and a junior, and each appoints two pro-proctors. They have more power than any officials of the university except the Vice-Chancellor, and are usually chosen from among the senior Fellows of a college, and from the colleges in rotation. They wear gowns of black stuff with heavy velvet sleeves and white bands. On seeing any young member of the university walking in the street without his cap and gown, the Proctor goes up to him, takes off his cap and says, "Are you a member of this university, sir?" If he replies that he is, the proctor goes on to enquire his name and college, to note them in a book, and to request him to call next morning at his rooms at such and such a college. When the young man calls, he finds in the ante-room several others also calling. On being ushered in turn into the Proctor's room, he is dismissed with a caution if it is his first offence, or fined $1.25, $2.50, $5.00, or $10.00, according to the gravity of his fault. The fines go into the "university chest," and amount to a quite considerable sum in a year. A serious fault in a proctor's eyes is the wearing of a "pink," that is a scarlet coat, such as fox-hunters array themselves in, for this dress offends a canon of the university, which is to the effect that students shall wear clothes of sober hues, or "subfusc raiment," as it is quaintly called. But fox-hunting is so favorite a sport of the class of men who are chiefly to be found at a "crack" Oxford college that the fault is winked at unless very prominently brought to the Proctor's notice. In fact a Proctor is almost always willing to pass by a breach of rules, provided that it is not committed under his very eyes, in such a way that to overlook it is impossible. It is the great ambition of the gay shop boys and attorneys' clerks in Oxford to be addressed by the proctor, but he very rarely mistakes them for undergraduates. Occasionally a young Cantab paying a visit to the sister university causes a proctor the trouble of addressing to him a question which is answered in the negative, but this must be admitted to be a quite pardonable mistake on the part of a Proctor.

The University has two "Burgesses" to represent it in Parliament, and a very agreeable constituency it is, for, since by etiquette there is no canvassing of votes, the expense of an election is reduced to a minimum. Besides this a man cannot but feel proud at being chosen a member of Parliament by a constituency the

very humblest voter of which is at least a master of arts of the greatest university in the English speaking world. The University has other officials: a registrar, a keeper of archives, a librarian, sub-librarians, curators of museums, etc. The term "Professor" is applied at Oxford only to men who "profess," that is, occupy the university chairs of Greek, Latin, Hebrew, Arabic, Anglo-Saxon, Pastoral Theology, or whatever the subject may be. The ordinary teachers at the colleges, though they may be men of European reputation, are called simply Fellows, tutors, or lecturers. The tutors and lecturers are always Fellows, past or present, of a college, and receive additional emolument for the work of tuition. Every undergraduate member of a college is assigned to a tutor, who is supposed to look after him, and act as guide, counselor and friend to him. I am sorry to say that tutors, are, or were, frequently of very little use in this direction. Being not infrequently men of humbler birth than their pupils, and of those somewhat shrinking habits which very studious men acquire, they are half-afraid of the wealthy, high-born youths, of whose sports and customs they know but little. Often, too, their ambition is set upon high preferment in the church, and they think more of the learned books and commentaries which are to win for them Deaneries and Bishoprics than they do of their pupils. But yet tutors who do look after their pupils are increasing in number, and at such a college as Balliol, for example, I understand that the students receive much help and attention from their tutors. Of the scholarship and learning of tutors there is never any question; but sometimes the students do not reap the full benefit of them.

At least once a year each college holds an entrance examination, at which young men whose names have been entered upon the college books as candidates for admission are examined. The subjects of examination are the same as those for Responsions, the first university examination which members of the University are called upon to pass. The entrance examination is conducted by each college for itself, and those who pass usually come into residence in the following October, though a few enter at the beginning of the Lent and summer terms. These men become "commoners" and wear upon their heads a trencher-cap, and upon their backs the short, skimpy, little, black apron which serves the ordinary Oxford undergraduate as a gown. At Cambridge the

shape, cut and color of the gowns worn at different colleges vary, but at Oxford all "commoners," no matter of what college, wear gowns of the same cut, color, and material.

Each college also holds annually an examination for the choice of "scholars," which is a very different matter from the entrance examination. The cleverest and best-prepared boys from the various "public," high, and grammar schools offer themselves as candidates for scholarships, and as each college offers only two or three scholarships in a year, the competition is very keen. A scholarship is an allowance of from $400 to $500 per annum, and is usually tenable for five years, thus giving the holder time and opportunity to take "double honors," if he is so disposed. An exhibition is of the same nature, but of smaller value and less honorable. Scholars wear what are called "scholars' gowns," which are much fuller and handsomer than the so-called gowns of the commoners. In some colleges scholars have rooms allotted to them free of rent, and in others they do not pay tuition-fees, which vary from $105 to $150 per annum. A college looks to its scholars to keep up its reputation, to take first classes in "the schools," to win university scholarships and prizes. The hardest scholarships to gain are those of Balliol College, and Balliol scholars take high rank intellectually. An ambitious young man cannot make a better start in life than by winning, if he can, a Balliol scholarship. If he can hold his own among his fellow-scholars, he need not much fear the competition of the outside world. Many of the rising young men of England have been scholars of Balliol.

Each undergraduate has two rooms, a sitting-room and a bed-room, either within the walls of the college, or in one of the licensed lodging-houses in the city. Some of the rich men may have three rooms, but few or no sets contain a larger number than this. A popular college always has more men than it can find room for within its own walls, and some of them must wait until college rooms fall vacant. Scholars are always furnished with rooms in college at once. The furniture in a set of rooms is bought from the previous occupant at a valuation, which may vary from a hundred to a couple of thousand dollars according to the taste and means of the owner. China, glass, electro-plate, bed-linen, table-linen, etc., are procured by each new comer to suit his own wants and resources.

The undergraduate has to keep four terms in each academical year. Michaelmas or October term; Lent term; Easter and Trinity terms. These two last form together one period, usually called the "Summer term." Each of these three periods is of ten weeks, during six of which the university requires a student to be in residence in order to count the term towards a degree. A college is a little more exacting than the university, for it requires its undergraduates to reside for eight weeks in each term. Thus the college year amounts to twenty-four weeks in all, all the rest of the year being vacation. The longest vacation lasts from June to October, and is called the long vacation, the "long vac," or simply the "long." During this period "reading men" do a large part of their hard work, either at their own homes, or in quiet country places.

The undergraduate is, as we have said, in residence for twenty-four weeks, and the usual allowance of a "quiet" man for this time is a thousand dollars, though some few men may contrive to get on with as little as seven hundred and fifty dollars. Besides this an undergraduate usually owes at the end of his career some $500 or $1000, often, of course, very much more. Any man at a good college, whose social connections are satisfactory, has no difficulty in getting credit for considerable sums from tailors, wine-merchants, picture dealers, stable-keepers, etc. Indeed such people are very anxious to get his name upon their books, for, though such a man may be slow in paying, it has been found by long experience that he almost invariably does pay. The charge of extortion is not infrequently brought against Oxford tradespeople, but, after a pretty extended acquaintance with them, I cannot say that I agree with this view. Their charges are not higher than those of first-class tradesmen in any other towns, and their forbearance is greater than would be believed in this country to exist anywhere. A fashionable Oxford tailor does not send in an account more than once a year, and even then by no means expects the whole amount to be paid.

I have said that each college in the university has a distinctive character of its own, and have already made a few remarks about the most distinguished college, viz., Christ Church. Next in public estimation to Christ Church may be placed the King's Hall and College of Brasenose, commonly called Brasenose, or B. N. C. This college is much affected by men from the great "public"

schools of England, and has a higher reputation for excellence in sports than any other college. During all the six years of my undergraduate and graduate career, the stroke of the Oxford University Eight was a Brasenose man; and a year before my time eight men out of the University cricket eleven were from this college. Among the ranks of B. N. C. men were also reckoned the captains of the University athletic club and of the University bicycle club; also the finest racquet-player at either university. The boat of Brasenose college has more frequently been head of the river than that of any other college, and I learn from the *Oxford Times* that in 1890 Brasenose rowed head both of "The Eights" and of "The Torpids," the Eight being the first crew of a college, and the Torpid the second crew. The Torpid races are held in the January term, and the Eights race together in the summer term. In the university crew of 1891 there were three Brasenose men. Nor has the college lacked scholars; the only "treble first-class man" I ever heard of was a Brasenose man.

The reputation of Balliol College has risen very high under its present distinguished master, Dr. Jowett, who is Regius Professor of Greek, and perhaps the most profound Platonist of the day. Its students win more first classes, university scholarships, and prizes than those of any other college.

Exeter College is very large, and includes both a "reading set" and a "fast set." It has of course, a boat club, cricket club, football club, wine club, and all the regular college societies. Among its Fellows is J. A. Froude, the historian. Trinity college is a nice, quiet college, of moderate numbers, but of very good reputation. Cardinal Newman was an honorary Fellow of Trinity. Queen's College is chiefly frequented by men from North-country schools, and Jesus College entirely by Welshmen. New College having been founded by William of Wykeham, who also founded the famous school at Winchester; many old "Wykehamists" are to be found there. The college chapel is a very fine structure, and the services held therein are so beautiful as constantly to attract lovers of exquisite church music. For this reason men who intend to try for the degree of Bachelor of Music usually attach themselves to this college, which, despite its name, is one of the oldest in the university.

The buildings and grounds of Magdalen college are exceedingly fine, there being nothing in all Oxford to surpass the great

Tower, the Founder's tower, Addison's walk, and the deer park. The music of the Magdalen chapel is second only to that of New College, being finer than that to be heard at the Cathedral. Oriel College is of comparatively small size, but some years ago it numbered some very eminent men among its Fellows, who were attracted by the fact that it was the first college to throw its Fellowships open to general competition among the graduates of the University. Keble College was founded to meet the needs of men whose parents are not inclined, or able, to give them large allowances, and are glad to send their sons to a college where the expenses are smaller and more within the control of the student himself than is the case at the older and more distinguished colleges. Many young men of High Church proclivities go to Keble, for the chapel and its services are decidedly "high." The altarpiece in Keble chapel is the famous picture entitled "The Light of the World."

At St. John's College are to be found many men from that famous old London school, Merchant Taylors. Corpus Christi College has a high reputation, and its scholarships are believed to be harder to obtain than those of any college except Balliol.

With the mention of one more college these notes must be brought to a close. All Souls' college is remarkable for the large number of its Fellows, and the fewness of its undergraduates. Of the latter it has only five, who are termed "Bible Clerks" from the fact that they take a certain share in the services of the college chapel. The old rule was said to be that a Fellow of All Souls must be "well-born, well-clothed, and *moderately* learned." There probably never was any such rule, but the description was a fairly true one in early days. Now, however, under the Wardenship of Sir William Anson, many distinguished men are Fellows of All Souls. The reredos in the chapel of All Souls is very fine, and has recently been restored with great elaboration, scores of statues having been added to the reredos.

This is but a slight sketch of the colleges of Oxford, each of which is an ancient foundation, requiring for any adequate account of it an entire article. Some colleges well deserving mention have been altogether omitted from these notes, but enough has, I hope, been said to show that a young man, acting upon the advice of well-informed friends, ought to have no difficulty in choosing a college just suited to his special tastes and requirements.

NOTES ON PRINCIPLES OF EDUCATION.

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I.

PERIODS OF DEVELOPMENT.

1. In the following outline, of the three natural periods of human development, attention is called only to the more important facts which affect the course that should be pursued by parents, teachers and others entrusted with the education of the young. These facts, moreover, if carefully noted will greatly assist in making clear the principles and laws of physical and mental development hereafter presented.

PERIOD OF INFANCY.

2. This period extends from birth to about the end of the seventh year, and is marked by the peculiar conditions and changes set forth in the following propositions: —

3. *The infant commences the solution of the problem of life with a body and mind inherited exclusively from his parents.*

(*a*). Each infant commences life with a physical constitution inherited from his parents. This constitution, and this alone, must be the starting-point of all physical growth. Hence this must determine and regulate, in the first place, the conditions, including the supply of food, with which the infant should be provided, through the agency of the parent and teacher, to produce a healthy and vigorous physical organism.

(*b*). It is now generally conceded by the best authorities that the infant inherits from his parents a wide range of aptitudes. At birth he is in possession of a definite individuality which distinguishes him from all other children. This individuality includes physical powers which necessarily develop a body containing the characteristic features of one or both parents. It also includes physical and mental power and aptitudes, which as surely as in the case of the features of the face, when unrestrained will manifest mental power and produce a course of action containing the characteristic power and actions of one or both parents.

(*c*). The infant commences life with an extremely plastic nature, capable of being moulded and directed almost as the parent or teacher may choose. This condition of things makes it possible to remove, largely, constitutional or inherited deformities, and to transform, if not to annihilate entirely, powers and aptitudes which, if left unchanged, would develop into a defective if not vicious character.

4. *During the first four years of the period of infancy, the child is dependent entirely upon the parents for his objective surroundings and treatment; hence the following duties are imperative upon the parents*:

(*a*). The parent should furnish proper physical conditions for the healthy growth of the child's body. These conditions include at least the following: A proper supply, at right intervals of time, of nutritious food; an abundant supply of pure air; the free application of pure water upon every part of the body; clothing of the right kind to protect every part of the body from injurious exposure, and which admits a free and healthful exercise of all its organs; constant and judicious out-door exercises, in which the feet, the hands and other organs are actively used; and plenty of undisturbed rest and sleep. These conditions should be carefully supplied throughout the growing period of the child's life. But the absence of them during infancy, and especially the first four years, results in greater evil than at any other time.

(*b*). The parent should furnish proper conditions for mental growth. These conditions include at least the following: Such contact with natural and artificial objects as will produce a healthful activity of all the senses; such help, in the form of example, as will lead the child to use words correctly in expressing his own actual experiences; such exercise and guidance as will enable him to form the habit of using his feet, his hands, his mouth, and other organs of the body in a proper manner; and such precepts and examples also as will cause him to exercise constantly his moral and spiritual nature.

5. *During the period of infancy the peculiar process of physical and mental growth that is going on demands special care in the treatment of the child.*

(*a*). About the end of the seventh year the brain reaches nearly its full size, while the other organs of the body have little more than commenced their growth. The imperfect condition of

the brain during this period, coupled with its rapid growth, unfits it for continuous work. In this connection it should be carefully noted that all physical as well as mental activity is the direct product of brain-work. Hence, to save the brain from overwork, the greatest care must be taken to guard the child against undue physical as well as mental activity.

(*b.*) Physical activity is the natural and necessary product of the growing process going on in the body, coupled with the endless variety of new experiences which contact with the external world brings to the child. Hence any course of treatment of the child, either in or out of the school which prevents unduly this activity, subverts a necessary condition of growth which will prove fatal to the natural and successful development of the body and of the mind. It is therefore clearly the duty of both parents and teachers to guide, not to prevent, this activity.

6. *The period of infancy is marked by certain characteristics which should determine the course of the parents and teacher in training the body and mind.*

These characteristics include the following: —

(*a*). The judgment, reason, will, or conscience plays but a very small part in controlling the child's actions. The activity, therefore, of the senses, and consequently of the mind, is the product of a condition of the sensory organs which may properly be called hunger. Sense food is demanded, and must be had without much regard to kind or quantity. The child pursues in this the same reckless and indiscriminate course as he does in supplying the demands of the stomach. Hence the parent and teacher must guide this intense sense-hunger, and furnish the proper conditions and surroundings for its healthful exercise and development.

(*b*). Inquisitiveness lies at the root of all mental activity. This powerful inherent tendency of our nature manifests itself in two forms; *first*, in constantly asking the question, *What is it?* and *second*, in pressing the question, *Why is it as it is?* The first is a demand for knowledge; the second for the principles and reasons of things. The child's inquisitiveness is almost exclusively of the first form, and is the natural product of the sense-hunger before mentioned. Unless he is blunted by unnatural treatment, he will insist upon knowing everything just as it is. He will continue to look at, to taste, to smell, to handle the objects that come within his reach, until they cease to yield him any more new

sense-food. Then he will show the same restlessness and uneasiness which accompanies the lack of a proper supply of food for the stomach.

(*c*). The child's actions are aimless in the sense of not containing any plot or plan which reaches beyond what is now and here. In short, they are aimless in the singleness of their aim. The child literally complies with the precept, "Take no thought for the morrow," hence the singleness and intensity of his activities. He loses himself entirely in what is now and here. If, for example, he is crying, he is all crying; if playing, he is all playing. This characteristic of child-nature, properly utilized by parents and teachers, acts as one of the most powerful elements in forming a simple, pure and strong character.

(*d*). Simple credulity is a natural condition of infant life. Everything is to the child what it appears to be. He is not disposed to doubt his senses, nor does he take any account of the endless variety of conditions that may give a false coloring to what is present to the sense or mind. Also, in making his own experience the measure by which he judges others, he necessarily takes for granted that the statements and reports of his seniors of experiences that lie beyond his, are of the same truthful character as his own. Hence he accepts of them without any questioning until, as he grows older, he establishes by unpleasant experiences their untruthfulness. When he reaches this conclusion a new condition of things breaks in upon him, and he gradually commences to doubt almost everything that has not been tested by himself. This process has its beginning in the period of infancy, is intensified in childhood and reaches its worst form in youth. In view of the natural consequences of the abuse of this characteristic of infant-nature, it should be a fixed principle of both parents and teachers never under any circumstances to deceive a child.

(*e*). During this period each organ of the body is in the most plastic state. Coupled with this there is intense physical activity and absolute singleness of aim. All the physical and mental power of the child is present in every separate course of action in which he engages. Hence the readiness with which his activities can be transformed into habits. The importance of this characteristic of infant nature cannot be overestimated. It is capable of being used for evil as well as for good. This is illustrated in

the formation of what are known as loafing habits, including the awkward use of feet and hands and other organs of the body. But it is especially illustrated in the formation of habits of disobedience to parents and others having rightful authority, and of disrespect of law and of the just claims of superiors in age and in experience. Habits of this kind are largely formed during the period of infancy. Hence at this time neither parent nor teacher should fail to give proper attention to this element of the child's nature.

PERIOD OF CHILDHOOD.

7. This period commences about the seventh year of the child's life, and ends between the twelfth and sixteenth. Surroundings, climate, health, and other causes produce unnaturally rapid development of the body and mind, and hence children pass from the second to the third period at different times between the ages named. An early change from the second to the third period is not desirable. The longer the spirit and simplicity of childhood continues, unimpaired by a vigorous activity of body and mind, the greater the promise of a strong and vigorous manhood and womanhood.

The following propositions suggest questions demanding the attention of the parent and teacher during this period: —

8. *The brain, sensory organs, and mechanical organs have reached a degree of maturity which demands a wider range of sports or physical exercises than during infancy.*

(*a*). An increase of physical energy is a necessary product of the process of healthful growth. This energy during childhood increases more rapidly than it can be used in the ordinary activity of the body, hence the demand for an outlet. Play or sport is the only natural outlet. Work can in no way be made a substitute. This is evident from the very nature of play and work. In play the primary end sought is the pleasure or enjoyment present in the very acts performed, while in work the primary end sought is always a useful result outside of the acts performed. In work the present experience may be pleasant or painful. The activity is continued, not as in play because of present physical enjoyment, but because of the influence of some outside power, and hence is not the natural demand of the growing organism. Then, again, surplus physical energy is generated in every organ of the body;

but work, from the very nature of the case, affords an outlet only for the energy generated in certain mechanical organs, such as the foot, the hand, etc., and hence in the formative condition of the body tends, unless carefully guarded, to destroy the symmetrical development of its organs.

(*b*). The natural discharge of surplus physical energy is always accompanied by present pleasurable sensations. This discharge takes place only through the exercise of the organs in which the energy is generated; hence the necessity of the endless variety or activity characteristic of the child. He runs, walks, jumps, rolls, tumbles, twists the body into all possible shapes, talks, laughs, shouts, and makes all kinds of noises; in short, if left to himself and surrounded by proper conditions, he discharges surplus physical energy through every pore of the body. This is the necessary accompaniment of a healthful physical growth. Hence, any system of education which does not make proper provision for the natural discharge of physical energy, can never build up strong and symmetrical men and women.

(*c*). The nature and character of sports change with the growth of the body and mind. During infancy and a large portion of childhood, the pleasurable sensations accompanying the discharge of physical energy is almost the child's sole reason for engaging in sports. Hence the same sport or the same round of movements continues to be repeated consecutively, until, through the exhaustion of surplus energy, this pleasurable sensation ceases to be produced. It only requires, however, a short time to restore this exhausted energy; hence the child returns again to the same sport with as much zest as before. The fact that the physical energy generated in the various organs of the child's body is quickly exhausted and as quickly restored, is the reason of the peculiar delight which he takes in a rapid succession of different sports which call into exercise constantly new combinations of his organs. In this connection it should be observed that, as the mental powers of the child commence to control his action — as he commences to feel an ambition to excel — his sports become more complex and continuous, and less of the nature of pure, spontaneous, physical exercise, and less productive of real good to the child. Indeed, purely ambitious considerations may control to such an extent as to convert what may be called a sport into an exhaustive and injurious work.

(*d*). No physical exercises are productive of such healthful results as those which are spontaneous and free from all constraint. Hence, plays and sports conducted in a well-regulated playground rank first among physical exercises. "Order in confusion," and proper regard to the rights of the weak and the strong, should be the only requirements of such a playground. No scheme of regulating the sports should be adopted that would deprive the children of the delightful experiences consequent only upon a free and spontaneous activity of the organs of the body. It is very clear, however, that every school is not, and perhaps cannot be, provided with proper accommodations for outdoor sports; hence resort must be had to calisthenic exercises as the next best thing that can be done. For disciplinary purposes, and to promote graceful movements of the body and the development of special organs, calisthenic exercises have a decided advantage over the other. Yet they fail to infuse into the body and mind that vitalizing and healthful power which results from free exercise in the open air; hence calisthenics should always have, where the other is impossible, the second place in the physical exercises connected with a school.

9. *The child during this period, associates indiscriminately with other children of his own age, and is easily affected by their language, actions and habits.*

(*a*). The distinction of sex has but slight influence in determining the child's associates during this period. The same natural impulses regulate the general conduct of both boys and girls. The natural promptings and attractions of their physical natures are the same. Hence they enjoy, unless warped by conditions imposed by the parents, the same plays and sports. These plays and sports bring to both the same intense pleasure. This state of things should not be disturbed by artificial requirements imposed in obedience to the supposed demands of society. In this period of child-life, boys and girls should be allowed the same freedom of outdoor sports, and should, under proper restrictions, mingle freely with each other.

(*b*). If left to his own natural impulses, the influence of occupation, position, or rank in life, and so on, is almost entirely disregarded by the child in choosing his associates. Pleasure or enjoyment is the chief thing sought in his companions, and this pleasure comes to him during this period chiefly through the exer-

cise of his physical organs. Hence he selects as his associates, without much regard to anything else, those who can minister most freely to this exercise. If he enjoys special field sports, his companions will be such as can contribute most to this enjoyment. It matters little what they are socially or morally; the boys from the lowest stratum of society are valued as companions in those field sports just as much as those from a higher plane. This natural forgetfulness of all social distinctions accompanied with the strong tendency to form habits, is one of the most powerful elements for good or evil in child-nature. Properly directed it will build up a broad and noble manhood, which will always exercise sympathy for all classes and conditions of men. But if left unguided, it usually, as society is now constituted, leads the child into wrong courses of action, and fixes upon him habits which affect injuriously his whole life. Hence the importance upon the part of parents and teachers of a careful study of this phase of child-life. Hence, also, the importance of the most earnest effort to surround the child with such conditions as will rightly guide him in his necessary associations with other children, and in the choice of his companions.

THE MORALITY OF THACKERAY'S ART.

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THE highest morality is truth. It is the crowning glory of all the moralities, and, in strict logic, it involves them all. Courage, honesty, purity, loyalty, gratitude, reverence, charity, humility, all seem to be shining orbs revolving around that central sun of truth. The highest and most comprehensive of virtues, it is naturally the rarest.

This being so, it is manifest that no art can be genuine in the highest sense, which is not in some sense true. When we are shown an art that is so true to nature as to find a witness to its truth in our own breasts and in our daily observation of life, we must grant that here indeed is a living morality, preaching to heart and mind with an authority that conscience cannot fail to recognize.

Is not Thackeray's art such an art? Is he not, in his insight

into the human heart, true to nature beyond any writer of the century?

Walter Scott is richer in variety; more picturesque; a painter of manners, customs, costume, and dialect; the matchless magician that has called to life the past; a delightful blending of poet and antiquarian, humorist, and noble gentleman, infusing his own high and pure spirit into all that he produced. In his books we have the social whirl of many an age. But he does not dip his pen so deep in the brain-fluid that creates character. There is a flavor of the humorist's extravagance and the poet's taste for the picturesque about Edie Ochiltree and Meg Merrilies, the Antiquary and the Baron of Bradwardine, to say nothing of the Black Dwarf and the Black Knight, Sir Piercie Shafton and Madge Wildfire.

Dickens, with all his charm, has always a touch of caricature about his portraits. He seizes a striking trait and builds a whole character on that hint, without regard to the truth of nature. His high spirits run away with him, while he is in the act of taking observations.

Bulwer — far too much under-rated in these days among English-speaking races — gets his best suggestions from books rather than from life, and is never realistic enough to reach that highest art that conceals art. What proves this is the fact that Darrell and Lionel, Audley Egerton, Harley L' Estrange, Riccabocca, and Leonard Fairfield are no more real to us than Glaucus and Sallust, Rienzi and Adrian di Colonna, Hastings and Warwick and Gloucester; while the blind girl in the Pompeian story is even more a living presence in our memories than the beauties who queen it through the scenes of his tales of contemporary life.

Charles Kingsley and Charles Reade, both enthusiasts and both admirable artists, are great romancers rather than novelists: they idealize too much to give us the familiar truth of everyday life. Hypatia and Amyas Leigh are glorious beings, they are real in a sense, but they are highly idealized realities. *The Cloister and the Hearth* is the most charming of all Reade's books, and it is as purely romantic as Miss Yonge's *Dove in the Eagle's Nest* or Blackmore's *Lorna Doone.*

Anthony Trollope, whose pencil sketches with painstaking monotony scenes the most realistic, shows us only the outside of people, and his people are for the most part too commonplace to furnish lessons in morality to anybody with a soul worth saving.

Most of the modern "realists" make the mistake of giving us in their art either transcripts of colorless people it frets the mind to dwell so long with, or of monstrosities and debasements the long contemplation of which can be only depraving to the mind. Stevenson was too good an artist to make a novel of the Jekyll-Hyde creation. Howells ought to have been too good an artist to have stretched the inanities of his *April Hopes* simpletons into Pantagruelian proportions.

Charlotte Bronté and "George Eliot" created real characters, but the canvas of the former was narrow, and her characters are confined to a few strong and singular types, while the author of *Adam Bede* spoiled her later art — adoring criticism to the contrary notwithstanding — with the solvent of metaphysical analysis.

The best of the living are at their best as painters in miniature.

Thackeray, in spite of his acid humor and caustic wit, which too often led him to endanger his effects by playing showman to his pictures, as an artist stands apart from all these. To men who have known the world, who have seen life at both ends as well as in the middle, he is truer to nature than any of the fine artists I have named. He is indeed the greatest painter of human nature since Fielding.

This truth to nature is in itself a high morality. But it brings with it, besides, the lesson that virtue and happiness are independent of wealth and power and lofty station; that, in the homes of the great, life may be mean and contemptible, as well as wretched, while self-respect and contentment may bless the lot of the humblest. It brings to light the fact, so valuable to impress upon the young, that the men who shine in the practice of those vices that tickle the vanity of all who live for the applause of their fellows, are selfish dogs, glorying in their own shame until the day of retribution comes that exposes them to the scorn of all mankind. It shows that plain, honest truth and loyalty, though in the homely guise of simple, unattractive Dobbin, will win in the long run respect, confidence and love. It sets in their true light those cankered evils that are among the conventions of so-called good society: the false spirit of exclusiveness, the snobbery that is its inevitable result, the inequality of inheritance and the far-reaching evils consequent upon it, the endless hypocrisies entailed by

the emulation of classes, and, above all, the curse and the degradation of marriages for the sake of money or rank.

Thackeray's books abound in revelations of these features of society, and he applies the lash of satire unsparingly to meanness, insolence, vicious folly, hypocrisy, false codes of honor, and every form of affront to that nobleness which God's image ought to have, and to that spirit of love which Christ died to instil into us.

He has the serious temper, the indignation, the concentrated bitterness of the born moralist. Swift's sarcasm and Fielding's irony are his natural weapons. But he lacks the graceful and genial temper of Fielding, that exquisite Cervantic humor which sympathizes while it mocks. The light touch of comedy is hardly in his line. He is too dead in earnest for that. Only in *Henry Esmond* does he catch sunlight enough to sparkle.

In all his books he reiterates, again and again, his satire on the foible of pretension. Every form of that vice has upon him the effect of stirring the embers of psychic force into flame. Sometimes the satire is bitter, often it is merely contemptuous, it is very rarely merry and good humored. In dealing with the Pharisee, the self-righteous hypocrite of society, he is especially pitiless.

But, if Thackeray were only a satirist, however able as such, and however useful in his own time in combating contemporary forms of the ever-present evil in society, there would be little reason for a study of the morality of his art. For — to be candid — his satire is often clumsy and wearisome. In his didactic zeal he is too prone to forget the delicate strokes by which art hints — and only hints — its lights and shades.

It is not, then, in his professed preaching that he is at his best as a moral teacher. To the youth of Lacedæmon the drunken Helot was a striking lesson as to the degradation of intemperance; but a better example, a higher incitement to a noble life, is the living instance of self-control to inspire young men with the eager spirit of emulation. It is from this richer and sweeter side of humanity that Thackeray has drawn his best pictures.

If these nobler types stood alone, or if their foils were less strongly drawn, the effect, as a moral tonic, would not be half so great. But they are contrasted with splendid types of vicious propensities, personages on whom Thackeray has used his richest gifts of satiric skill; and, that the moral lesson may not fail, these

impersonations of evil in the long run meet the punishment that is their due, however brilliantly equipped for success in this world. Even wit, subtlety, profound knowledge of the weaknesses of human nature, and thorough unscrupulousness — a tremendous temporary power evil natures have the advantage of — fail in the end. Becky Sharp, that wonderful conception of genius, has these qualities, yet what à miserable failure is hers!

Capital as *Vanity Fair* is, however, it does not seem to me that the master had yet found his steady hand. There is no just proportion here as yet. The ability of Becky, the devilish concentratedness of her evil will, and her hard, bright wit outweigh in artistic force, outshine in artistic splendor all the honest good there is in Major Dobbin and the doll-baby sweetness of Amelia Sedley. Thackeray had not mellowed yet from satiric rage into the deeper and sweeter fertility of creation which produces beings like Warrington, Pendennis, Esmond, Colonel Newcome, and Clive.

In the delightful works in which these characters appear, nobler aims than the common ambitions of life are impressed on the mind. Personal purity, manly self-control, and generous faith in the worth of others, are made alluring to those who have yet to begin the battle of life.

The youthful follies of Arthur Pendennis, his narrow escape from being drawn irretrievably into the vortex of ruin for heart and conscience, the staunch friendship of Warrington, and the noble lessons given Pen by his friend's unselfish character, are moral influences, so purely is the tale told, that every boy ought to be subjected to, when he has passed beyond the age for Walter Scott to teach him chivalry.

Then, consider *The Virginians!* Through all the pages of that book — they are too many, I know, but I have not the heart to wish them fewer — honest truth and loving trust and loyal brotherhood keep enforcing their sweetness by every power of expression and contrast.

And where in all literature shall we find a character so lifelike, and, in all the vicissitudes of life, so constantly that of the high-toned gentleman — not in manners only, but in heart and soul as well — as old Colonel Newcome? The pathos of that scene where, after all his trials, with the humility of the Christian and the simplicity of childhood, the old soldier answers *Adsum* to the call of

the Angel of Death, is only equaled by its profound morality — its lofty teaching that not in wealth, not in worldly honor, not in any form of earthly happiness is true nobility found — the grandeur of soul that moves the highest natures to tears of recognition and sympathy, — but in duty cheerfully done and trouble bravely borne, with loving care for others and simple forgetfulness of self. This grandeur of self-renunciation is the motive that gives its richest value to Victor Hugo's conception of the character of Jean Valjean, the heroic convict of *Les Misérables;* but what an infinite superiority in art belongs to a real being like Colonel Newcome, who might have dined with us any day without our recognizing anything extraordinary in him, when we try to set beside the man of flesh and blood that luminous phantasm conjured up before the mental vision by the genius of Hugo!

It is, however, the most artistic of Thackeray's novels that gives the finest and the fullest illustrations of the positive side of his moral philosophy. The character of Esmond, cool, resolute, strong in self-control, observant, and reflective, the soul of honor, nobly unselfish, gentle and tender as a woman, yet brave and enthusiastic; this character is in its very conception and in the naturalness of its portraiture a grand moral lesson. Like the diamond, which neither acid nor alkali affects, it can bear the tests of the most dissimilar schools of criticism. Yet Esmond is as real as Becky Sharp or Blanche Amory. Major Pendennis, Captain Shandon, and Barnes Newcome, three types so different and so clearly drawn, are not one bit more lifelike. That Thackeray has drawn men like these — Esmond, Colonel Newcome, Warrington, Pendennis — men fit to live in intimate fellowship with Sir Philip Sidney and Robert E. Lee, is sufficient answer to the charge against him of being a cynical satirist and nothing more.

Let us examine a little more closely into the use to which he put the satirical side of his genius. There are in society gross evils which the painter of human nature is compelled to portray, if his canvas is large and his purposes comprehensive. But it is rare to find a writer of power with both the will and the skill to refrain from making such pictures seductive. We all know how often the passions are inflamed by the vivid coloring, or the still more attractive mystery, in which some writers of fiction indulge. Of Thackeray it can be said, as of Walter Scott, that in every such case his touch is pure, and the young can read not only

without defilement but even with increased veneration for virtue. For, it is certain that the fop, the rake, and the profligate, too often in real life the admired of the young, and too often set forth in attractive colors by writers of romance, are stripped by Thackeray of all disguise and held up to merited scorn and ridicule. He takes care to let us see what a poor creature the dashing young dragoon, George Sedley, is. He is at pains to have us loathe Barnes Newcome as he deserves. A beast like Lord Steyne is pictured the beast that he is. Derision is the fate reserved for the shining fools; scorn, hate, and horror are ready to be heaped upon the mean and base.

There is, then, justification for his apparent cynicism. He could not "see life steadily and see it whole" without setting curse over against blessing. It is much that, with gaze so firm and so penetrating, he saw so much that was gracious and beautiful and lovable in human nature. Of masculine excellence he drew several noble varieties. Reverent as he and the best of his creations are to woman, it was not given to him any more than to Walter Scott to create women as fine of mould as his men. His best women are gentle, sweet, and pious souls, natures of angelic tenderness and purity. But the wilfulness, high spirit, and brilliancy of Beatrix Esmond have a charm about them for poor human nature that almost quenches the light of her mother's loveliness. Becky's fire and wit and independence and busy subtlety certainly win her a larger share of the reader's interest, up to the revelation of her unmotherly treatment of her child, than all Amelia's amiability and sorrow. Ethel Newcome and the women in *The Virginians* have more spirit about them. But even Blanche Amory can hold her own, with all her cranks and whimsies and falsenesses, against the somewhat cold interest Helen and Laura inspire us with.

After all, however, where are we to seek women of the highest kind, in the creations of genius, outside of Shakespeare? Thackeray shares his incomplete success in this department of art with the proudest names in literature; and had he been able to give us sisters to Portia and Imogen and Rosalind and Viola, the morality of his art would have been no finer than it is, whatever may have been the ineffable charm of books, already delightful, so glorified.

REVISION OF THE MICHIGAN COURSE OF STUDY.

SUPT. STUART MACKIBBIN, M. A., MARSHALL, MICH.

I.

THE type of the Michigan School System is that metaphorical "Educational Ladder" which Huxley is said to have conceived as extending from the gutter to the university with the youth ascending thereon. On this idea our system is built. Its faults lie not in the system itself or its fundamental principles, but rather in a misconception of it, and a too literal interpretation of a mere figure of speech. Because we are to have such an arrangement that a boy may pass from the beginning upward to the Baccalaureate by a regular progression and with a perfect economy of time, it does not follow that he whose education must end with or within the common schools, should not have a finished and rounded out course of study, instead of being required as at present to pursue a college preparatory course. To continue the figure, those who cannot pass up to and out of the sixteenth story of our educational edifice should have comfortable flats provided for them on the lower floors, instead of being compelled to stay in the elevator.

That a pupil who must make the high school his college must pursue such a preparatory course does more than any other cause within the control of school administration to lessen attendance in such department, and we assert also that it is responsible for much of the dropping out of scholars in the grammar grades, for these, just as much as the high school, are a part of the ladder. The remedy does not lie in the establishing of commercial courses — which have been the distinctive craze of the last few years — holding out to tenth grade pupils the glittering bauble of a diploma and public graduation to allure them from legitimate high school work and the transformation of fifteen or sixteen-year old children into alleged book-keepers, stenographers and typewriters.

Very eminent authorities argue that such a preparatory course is the best possible one for those ending with the high school, yet would any man send his boy to the preparatory department of Hillsdale, Albion or Olivet, and have him take a course there?

Yet this is just what the youth of Michigan are forced to do; go through a university preparatory school, or else be deprived of more than a mere elementary education. Do not the preparatory departments of these colleges offer academic courses for such students and recommend the preparatory courses only to future college students? This idea of a preparatory course for everybody is as reasonable as for an architect, in case his patron has not sufficient means to build a sixteen-story edifice, to design one of twelve stories without the roof. To build an edifice according to its use and the means of the builder is as true in education as in architecture.

Such an idea of the high school is the legitimate consequence of the "Educere" theory of education. That theory which deforms bright children by giving them faculties, latent faculties, and makes education the business of developing such faculties. The high school has been defined by an eminent Michigan educator, as that department of the school in which pupils are taught to think; it was also stated that any study, no matter how practical, that was not conducive to this end, should be omitted from the course. How sad to think that for eight years the pupil must attend school with his faculties in an undeveloped condition, while the great mass who never climb the ladder even that high are compelled to tread the weary path of life having latent faculties, and thinking not.

You are right, psychological pedagogist, but not as you think. The eight or nine years' grind of reading, writing and spelling, of an arithmetic of unessential details and incomprehensible theories, of the so-called English grammar, and what passes for geography is well calculated to crush the self-activity of the individual and the pupil reaches the high school with murdered faculties and the labor of that department becomes simply that of restoring suspended animation.

It is certainly very pleasant to plan an educational system on the theory that all will pass through to the top, but facts are against any such theory, and it is doing great injustice to attribute the cause to parental greed or parental neglect. Every person's education (school education) must sooner or later end, and when it does better that it be an humble edifice but completed than an unfinished column of majestic proportions.

It is also true that in our State, uniformity is out of the question. We are aware that this is a heterodox doctrine, but we will

advocate it even at the risk of arousing some educational heretic hunting Doctor Patton. If there is a naturally heterogeneous state, it is Michigan. Every resident of the state knows it, and an examination of the map will make it clear to a non-resident. Our state legislature frequently enacts special legislation for some localities, or exempts other localities from certain laws. Why then should we in school management advocate what in business, society and state administration is not attempted? In our present district school course of study, we have an illustration of this mistake. The same course of study, the same system of grading, and the same time exactly is to be given in all cases, from the wealthy agricultural districts with their ten months' school, to the frontier log schoolhouse with its three or five months' term. In our high schools, the Ann Arbor course with all its defects is slavishly imitated, yet this very course is unsatisfactory to the men in charge of that school and is tolerated by them because of the peculiar situation of that school as the preparatory department of the University, and the fact that their attendance of several hundreds is from many states and different schools, pupils of every possible variety of attainments and experience, has shown that their peculiar arrangement best accommodates those pupils. In our large cities also we question the wisdom of ward uniformity. Wards of the same city are often as unlike as are different cities of the state, yea, even more so; for while a city or village is a whole, a unit, and includes many different classes and conditions of people, the wards or sub-districts of a city are unlike, and the larger the city, the greater the degree of unlikeness, and consequent necessity for diversity of schools. In some wards the people are well to do, and the children can attend regularly and for long terms. The population is permanent and there is little moving out and in. Many children do not begin attending until seven or eight years of age, in other wards children attend irregularly and but for a few years at the most, and it would be a relief to the mothers and a mercy to the children in such cases if school attendance could begin at an earlier age than that established by law.

Before presenting a plan of revision, let us consider the details of the present course. The pupil comes up to the fifth grade (to quote from the catalogue of one of our best city schools) "familiar with addition and subtraction, the simple exercises in multi-

plication and division, weights and measures in their simple forms, simple fractions, simple exercises in percentage and application of numbers to United States money." During the fifth grade, the elementary text-book, Sheldon's, is completed; in English, the grade finishes an elementary text-book which gives a good, thorough course, more than is necessary for all practical purposes, and more than is necessary to begin the study of another language. In geography the earth has been covered, rather thinly it is true, but the pupil has a good foundation. He has knowledge enough; besides this, provision is made for most excellent work in music, drawing, writing, reading and English composition. Without a doubt, this catalogue sets forth the exact truth and is a fair, average statement of the work done in the city and village schools of our state.

The average pupil now ought not to be over eleven years of age, though as a matter of fact the average age of the last promoted fifth grade in the school in question was exactly twelve years; he also possesses all the knowledge required to enter either the Phillips Exeter or the Phillips Andover Academy, or the Boston or the Roxbury Latin School; he is too young to enter the academies, but just the age preferred at the Latin schools. The Boston boy can now begin his preparation for college, the Michigan boy must wait three years and give this and fully a third of the fourth year to work which not only is not required in his preparation, but is very little aid to him in securing a better preparation.

In these three years, the Michigan boy will recite in reading six hundred times; he will make the same number of recitations in English grammar and composition, mainly the former; six hundred to seven hundred in what goes under the name of arithmetic; four hundred to six hundred in geography, a couple of hundred in United States history, and half as many in physiology, besides from two to five shorter exercises per week in each of spelling, penmanship, drawing, elementary science, temperance physiology, singing, and morals and manners. An aggregate of twenty-five hundred recitations in primary studies after he has become reasonably proficient in all of them except history, — for physiology, or some part of it, is usually taught *ad nauseam* in these primary grades — and furthermore he is two to four years older than is the French, German or English boy before he enters on his higher

work. Instead of twelve hundred exercises in English, besides the spelling and penmanship, a daily exercise in reading accompanied by some analysis of the kind which leads to a comprehension of the thought, — not to the hanging of words on the hooks of a fantastic diagram, — and a little, very little, parsing — with the same object in view, is sufficient, as is one, or at the most, two exercises per week in composition, especially when these exercises are used in connection with other studies, particularly history, elementary science and geography. More than this is a waste of time. We then have an aggregate of eight hundred exercises in English as against twelve hundred, a saving of four hundred, to which may be added eighty at least saved by omitting English grammar from the ninth grade. If grammar *must* be taught, by all means teach it with Latin; make it objective, as every difficult science should be taught; give the young pupil an inflected and not the most analytical of languages.

Probably the greatest waste of the pupil's time, when we consider the energy employed, is in arithmetic. Three and one-half solid years are given to this subject after the pupil is well equipped. If a pupil is to leave school with the fifth grade, he has about all the arithmetic he will ever use. Beyond the simple reckoning which every person must do, arithmetic is technical and should be studied as such and not as a part of a liberal education. There is a mental discipline in arithmetic, but it is not within the reach of the grammar school boy or girl. If mental development is desired, — and by the way, did it ever occur that children are often so well developed that they know nothing — it is not to be gotten by requiring the pupil to memorize set forms of analysis, under the delusion that he is explaining an example, or to make demonstrations that cannot be made by any logical process at his command. To require a pupil of these grades to state the "logical argument of an arithmetical solution" is to require him to exercise a power of introspection he does not possess. Better be satisfied if he gets the right answer without having it previously stated to work to; it is more than he does in a majority of cases. "Allow the pupils to do nothing except what they understand" is a nice sounding expression to use at teachers' institutes and kindred places, but, for illustration, how many civil engineers or surveyors can compute a table of logarithms, or in fact know very much about the theory of logarithms? They leave that to the

schoolmasters; they are satisfied to be able to use them in computation.

Arithmetic should not be discontinued in the fifth grade, but should be continued through all the subsequent years. What has already been taught should be made more thorough; the pupil should be made perfect in the art of reckoning, and that by the most expeditious and economical processes. More than that, there should be in the grammar grades, especially, a large amount of analysis, the working of simple practical arithmetical problems, not puzzles, by the shortest way to get the result regardless of formal processes. Not only should there be an economy in arithmetical processes, but in the use of mathematical means. The solution by arithmetic of many of the problems set in an arithmetical text-book is like a farmer starting out to do his haying with a scythe. Not only give the pupils the best processes, but the best tools; instead of grinding over arithmetic, give them algebra and geometry.

Four or five recitations per week in the sixth, and three each in the seventh and eighth grades are sufficient to do all the mathematical work the pupils can successfully accomplish. This will include in arithmetic, reckoning and analysis, an expansion of the work done below, square root and practical mensuration; in geometry, an elementary course covering the elementary definitions, and concepts, drawing the figures and the inductive discovery of many geometrical truths; in algebra, without using a text-book, or entering into theories or demonstration of processes, addition and subtraction, and multiplication and division by a monomial, can be practically taught, and also many of the problems in the arithmetics can be solved by the use of simple equations. To do this will require in these three grades an aggregate of not to exceed four hundred and forty recitations as against six hundred, besides an incalculable saving in nervous energy of pupil and teacher.

Another mistake made in these grades is the bringing of a pupil up to the eighth grade and then suddenly introducing him, without any previous warning, to a large text-book in United States history. A part of this saved time in the sixth and seventh grades can well be employed in two exercises per week in the oral instruction in United States history covering the ground twice.*

* The reader is referred to Vol. X., p. 159 of EDUCATION, for an outline of such a course

Three exercises per week in the eighth grade will be enough, and an introduction to the World's History can there be made. In connection with geography also, considerable historical instruction can be given, while much of the work done in geography can better be done in the history classes.

During these years there should be at least three exercises per week in science; not childish talks, or cut and dried object lessons according to some model extracted from some of the multifarious books on practical methods which reflect discredit on the profession, but solid work. The pupil should come up to the eighth grade with an amount of scientific knowledge represented by a thorough study of say, Paul Bert's "First Steps," but which would not be gotten in just that way. Much of the unsatisfactory work in science in the high school is due to the utter ignorance of the elements; a knowledge which earlier in the course might have been easily and agreeably acquired, but which is altogether too small business for a junior or senior.

This work in science, this study of nature, should begin when the pupil enters school and should continue without interruption till he leaves it. At first it need not necessarily be botany, or geology, or geography, or astronomy, or zoölogy, or physiology, or physics, or chemistry that he studies, but something of each. The subject matter is nature, the facts of which should be made familiar. He should be taught how and what the word Nature means, and that the world of nature lies around him and not between the covers of a book. After the first two years this observation work will differentiate into geography and the natural sciences; the former during the next three years, making a study of the earth and framing a skeleton on which to build, the latter going over much the same ground as the first two years, but more thoroughly, and to classify the facts of nature under the different sciences. In the grammar grades the ground will be covered again, but the subject will be science; geography also should be more scientific, more of the physical and less of the political, more of plant and animal distribution, the reason for the same and the effect on industry, more of the relations of the earth to man and of man to the earth, more of commerce and commercial routes and less of the locating of insignificant cities and rivers, more of sociology, more of the geography which comes from observation and extensive reading and less of that gotten from the study of a dry compilation.

WHERE HOLLAND FOUND "MR. BIRD" IN ARTHUR BONNICASTLE.

AS an illustration of how the characters in famous books are originated, a gentleman who is acquainted with the facts tells the following concerning one of J. G. Holland's well known characters in the book above named:

"Some time about the year 1870, the Congregational church at Adrian, Mich., had for its pastor the Rev. Mr. Powell, then a bachelor and very fond of flowers and birds and children. As one means of making the acquaintance of the young people and children of his church, he held at his bachelor quarters evening receptions for the boys over eight years of age, in which the social, intellectual and spiritual needs of a boy were all remembered. They were very free and informal, and the boys were encouraged to the greatest familiarity with their pastor, he making himself a boy with them, and thus gaining an influence which was marvelous over, not only the children of his members, but rough and uncared for boys of the street.

About this time J. G. Holland came to the place to lecture, and Mr. Powell invited him to be present at one of these boys' meetings. The author consented on the condition that he should not be asked to make an address or be put on exhibition in any way. Quite to his surprise, instead of being called upon to entertain, Mr. Holland was himself highly entertained and delighted with the spirit of helpful and unrestrained intercouse that existed. He saw boys whom he knew to be rude and untaught, drawn into helpful and inspiring relations with this man, and those who would have shrunk from anything religious in its nature, as boys naturally do, were led to listen reverently to the reading of the Bible and to join in simple prayers. It all so impressed him that he said before leaving: "I am writing a new book, and I shall draw one of the characters from what I have seen here to-night."

In a few months Arthur Bonnicastle appeared and the gentleman who relates the incident at once recognized in Mr. Bird, of the Bird's Nest of the story, Mr. Powell, and his close and helpful

relations with the boys of Adrian. The idea of the Bird's Nest, too, it is likely was taken from Mr. Powell's garden, where he delighted to lure and keep the feathered songsters, with whom he became almost as intimate as with the boys.

THE INTRODUCTION OF PRINTING INTO ENGLAND BY WILLIAM CAXTON.

RUTH B. WHITTEMORE, DORCHESTER.

I.

"'Tis to the pen and press we mortals owe
All we believe and almost all we know."

THE term Renaissance means second birth, but by a more definite application it is used to designate the period of time from the twelfth to the middle of the sixteenth century. In its widest sense it embraces all the great progressive movements following the dark ages, beginning with the general quickening of mental activity and including the discoveries of Copernicus and Galileo, the explorations and discoveries of Columbus, the invention of printing and the subsequent rapid spread of knowledge. In the narrower sense it is applied only to the revival of literature and art.

As a result of the new spirit of the times and the revival of the classics came the necessity for means of more complete interchange of thought. To supply this need in the fifteenth century, the art of printing was invented.

Previous to this for centuries, the art of writing, great in itself, had been the means whereby thought had been transmitted, and in different lands, at different times, various materials were used for this purpose. The ancients inscribed written characters on leaves, the bark of trees and stones, later the style and wax tablets, the brush and papyrus were used, and later still the quill and parchment.

When monachism was regularly established in the sixth century, the monks turned their attention to procuring and copying manuscripts, and, from this time on until the middle of the fifteenth century, all books were in the form of manuscripts, prepared and written with great labor. Much of this work was done by the

monks; much also, by professional copyists. At the time printing was introduced into Paris, it is said that about six thousand persons were employed in copying and illuminating manuscripts. These books were often very beautiful; written with great care, on parchment, with brilliant illuminations. Considering the time and cost of making such books, it is not wonderful that they were so rare as to make them almost invaluable, and that with increasing mental activity came the demand for some means whereby books could be produced with less time and expense.

During the first part of the Middle Ages, the church alone continued the writing of manuscripts, but at the beginning of the fourteenth century, came the rapid quickening of the desire for knowledge and the founding of schools and colleges, and the imperative demand for school books.

At about this time in Germany, playing-cards were painted, but towards the end of the century, a method of printing them from blocks was invented. This may be considered as the first step towards the art of printing. Soon after, rude pictures of saints were produced in the same way, or from soft metal. This was the second step in the course towards the great end. The third step was reached when block books came to be made. These consisted principally of wood cuts the size of a page, representing scriptural subjects, with the addition later of explanatory sentences. The most celebrated of the books without text is the Biblia Pauperum. One great difficulty encountered was the making of ink of sufficient consistency. This obstacle was overcome by the combination of boiling oil and ground carbon. The printing of block books necessitated the cutting of wooden types. As this was a laborious process, naturally, an attempt followed to use the letters separately, by cutting away from the block. With wood, this was never successfully accomplished, but the principle was developed and carried out later when movable metal types came to be used, and typography, or the art of combining separate letters and taking impressions from them, was invented.

This invention was not a sudden discovery, but the product of many experiments and gradual progress, and John Gutenberg of Mayence, is generally believed to have been the father of printing, though whether the idea of movable metal types was original with him, or he took the idea from early Dutch printers, is a disputed question.

It has been claimed that movable wooden types were first invented and used by Laurens Coster, at Haarlem, and that the art was stolen from him by a workman, who afterwards became a partner with Gutenberg. But it has been proved that movable wooden types were never used, and that the claims of Coster will not stand investigation. William Blades says: "There is no known instance of separate wooden types having been used by any early printers, but in certain editions of the 'Speculum' we distinctly find metal movable types, with the wood cuts printed in one colored ink and the text in another. The types bear plain evidence that they were cast, but in an extremely rude way, showing a much more imperfect method of casting than appears in the German Indulgense of 1454 (which is the earliest known date of any printed piece), or the first books of the Mayence printers. There are also numerous fragments of the Donatus, of the Doctrinale, and of Catho, in various editions and in cast types. The language of some, as well as the shape of the letters in all, show that these were without doubt produced in the Low Countries, although they are all, as was natural for such unimportant books, without any printer's name, and without the year of production, thus rendering it difficult to assign to them an unimpeachable date. After much study, I cannot help thinking that Holland was not only the birthplace of these Donatuses, etc., but that they gave the starting idea to the Mayence school of printers."

The Chronicler who wrote in 1499, states that he learned from Ulric Zell, a printer, that the art of printing was discovered at Mentz, in Germany, by John Gutenberg, who, however, had obtained his idea from Dutch Donatuses. Gutenberg had entered into partnership with three others, but one dying, and trouble occurring, a lawsuit ensued, resulting in the dissolution of the partnership. In 1450 he entered into partnership with John Fust, but this connection proved unfortunate, and in 1455, by a lawsuit, Fust compelled Gutenberg to relinquish his printing apparatus, with which Fust, aided by his son-in-law, Schoeffer, started a printing office. It is generally believed that the use of punches and matrices for casting metal types originated with Schoeffer. Gutenberg obtained new presses and type, but he was still unfortunate, and in 1462 the city of Mentz was sacked and nearly all trade destroyed. Gutenberg was taken into the service of Adolphus II., where he remained until his death in 1465.

Morley says, in "English Writers," Vol. VI., "Fust and Schoeffer attached their names to their books. Gutenberg never used his type for the perpetuation of his own name, or even the most indirect glorification of himself."

The invention of printing, like some other great blessings, was considered at first to be the work of the evil spirit. In "English Writers" we find this paragraph: — "But there is a colophon to his Catholicon, saying that it was printed and finished at Mayence in 1460, not by means of pencil or stencil plate, but by the admirable proportions, harmony and connection of the punches and matrices, and that this was due to the 'assistance of the most High, at whose will the tongues of children become eloquent and who often reveals to babes what He hides from the wise.' It is well to remember that the inventor of the art was one who required no praise for himself, but gave to God his glory."

Fust and Schoeffer continued printing until the sack of Mentz, and indeed, for a number of years after, but at that time their trade suffered greatly, and their workmen dispersed, and in this way the art of printing was scattered over Europe.

The first book printed at Rome was Cicero's letters, in 1465. The first book printed at Venice was also Cicero's letters, printed in 1469, by Jean de Spiro. Nicholas Jansen and Christopher Valdarfer were also early famous printers of this city. Printing was introduced into Nuremburg in 1469, by Henri Keffer and Jean Sensenschmidt. Keffer was one of the original Mentz printers. The most celebrated printer of this city was Anthony Coburger, who also had branch presses at Lyons and Basle. He was one of the greatest of fifteenth century printers. A press in Paris was printing in 1470, under three Germans. The first book printed at Naples was in 1471, and the first in Hungary in 1473; 1474 is the date of the first printed book in Switzerland. It was printed at Basle. In 1476 printing was introduced into Bohemia. In 1483, John Snell, a German, introduced the art into Sweden. Printing was introduced into Portugal in 1489, the printers probably being Jews.

In 1493, a grammatical treatise was published in Denmark, and in 1500, a treatise against the Waldenses was printed in Moravia. In 1560, a Russian attempted to establish a printing office at Moscow, but was prevented by a mob. In the Netherlands, presses were established in all the principal cities. In Alost, Utrecht and Lourain in 1473. John Veldener printed at Lourain, and as his

types resemble Caxton's somewhat, some have thought that his were the types first used on English soil. In Brussels, printing was introduced in 1476; in Antwerp, in 1482; Leyden and Ghent, in 1483. In Haarlem, the earliest printed work bears the date, 1483, although it is probable that printing was practised there much earlier. About 1473, Colard Mansion started a printing press in Bruges, and here it was that William Caxton lived for thirty years and printed his first work.

Thus far on the invention and spread of printing. And now about the father of English printing. He says of himself, "I was born and learned myn englissh in Kente in the weald where I doubt not is spoken as brode and rude englissh as is in any place of englond." The Weald was the name given to large tracts of forest lands in Kent. This was the seat of the original Flemish cloth manufacturers, introduced into England by Edward III. Nothing is known of Caxton's family. It is believed that he was descended from the Canstons of the manor of Canston, near Hadlow, in the Weald of Kent. The year 1412 was formerly given as the date of Caxton's birth, but modern biographers give it as 1421–'22. It is rather surprising that because Caxton wrote in 1471 that he was growing old and weak, biographers have supposed him to have been about sixty years old.

In the earliest volume of the "Warden's Accounts" in the Archives of the Mercers' Company, we find that in 1438, William Caxton was apprenticed to Robert Large, Mercer of London. In the fifteenth century the civic majority was not attained until the twenty-fourth year. The longest term of apprenticeship was fourteen years, and the shortest, seven. Supposing Caxton's term of apprenticeship to have been but seven years, he must have been about seventeen when apprenticed, and that would bring the date of his birth about 1421. Before his seventeenth year he had received the unusual advantage for a lad of the fifteenth century of an education, the extent of which is not known.

The duties of an apprentice were "to serve his master well and truly, to keep all his secrets, to use no traffic on his own account and to obey all lawful commands." The master fed and clothed his apprentice and taught him his trade. Robert Large, the Mercer, to whom Caxton was apprenticed, was very wealthy, and in 1430 became sheriff, and in 1439, Lord Mayor of London. He died in 1441, bequeathing various sums to his apprentices, who were not, however, released by his death, as it was the custom for

the executors to appoint a new master if the deceased had not done so in his will, or otherwise provided for his apprentices.

It is not known whether Caxton was placed under a new master who sent him to the Low Countries; or, if he left England of his own will, but it is certain that in 1441, the year in which Large died, Caxton had left England and was living in some city of the Low Countries; probably Bruges, one of the principal commercial cities of Europe and the centre of English trade abroad. Here Caxton established himself in business after the expiration of his term as apprentice.

At this time all trade in foreign countries was carried on by Trading Guilds, which were founded as a protection for merchants who would otherwise be in constant danger of unfair treatment from the inhabitants. In the Low Countries the various guilds combined to form the Association of Marchant Adventurers, or the English Nation, as it was called by Phillip the Good. This association or company was established by the Mercers in the thirteenth century, and although various guilds were represented, the Mercers formed by far the greater part. The governor of the association had most complete control over all English and Scotch traders, and to this position Caxton was chosen sometime between June 24, 1462, and June 24, 1463. It was his duty to oversee all unpacking of goods, to appoint packers, to settle all disputes and to pass sentence in a court consisting of himself and twelve justices who acted as advisers.

The treaty between England and Flanders expired in 1465, and as the success of trade depended upon the good feeling between the two countries, the king appointed Sir Richard Whitehall and William Caxton to investigate the state of affairs and to renew the treaty if possible. They were not successful, and almost immediately the Duke forbade the importation of English wares. The English, in turn, prohibited the sale of Flemish goods in England. In spite of all this the trade was carried on in secret. In 1467, Philip died and was succeeded by Charles the Bold, who was married at Bruges, in June, 1468, to Margaret, sister of Edward IV. of England. In September of the same year, three ambassadors, of whom Caxton was one, successfully arranged for a treaty, which went into effect in October, 1468.

As governor, Caxton's time must have been fully occupied, yet he lived in the city containing the famous library of Philip the Good, where the art of book-making was extensive, and he must

have had access to a large number of books through the medium of various private libraries. At all events, he found time to pursue his literary labors, for in 1468 he began to translate "Le Recueil des Histoires de Troyes." The work did not progress very rapidly, however, and he laid it aside after writing about forty pages.

In May, 1469, we find the last official record in which his name appears. In March, 1471, he was in the service of the Duchess of Burgundy. It is not known whether his resignation of the governorship came immediately after May, 1469, or nearer March, 1471; nor is the cause of the change or the exact service he rendered the Duchess known. Possibly it was due to considerations of health, or perhaps he wished to marry. In the latter case it would have been impossible for him to remain governor, as all merchant adventurers were bound to celibacy. As regards the nature of the services he rendered the Duchess, we find in 1471 that he was continuing his translation of "Le Recueil" in accordance with the command of his mistress, and with such good speed that he finished and presented it to her at Cologne in September, 1471. This work, which was a translation of one of the favorite romances of the time, soon became so popular at the court, that Caxton was not able to supply the demand, and so he turned for help to the art of printing. Colard Mansion, from whom Caxton learned the art, was a citizen of Bruges, and the first printer of that city. He established a press probably in 1473, although his earliest known book bears the date, 1475. It was from this press that the first book printed in English, and also the first in French, was issued.

DR. ANDREW S. DRAPER CORRECTED.

REV. A. D. MAYO.

HON. ANDREW S. DRAPER, State Superintendent of Instruction for New York, contributes to the New York *Educational Review* for April, 1892, an elaborate article entitled "Public School Pioneering in New York and Massachusetts." The article was suggested by an address on "Compulsory Education in Massachusetts," by Mr. George H. Martin; delivered a year ago, in Philadelphia. Mr. Draper's contention is that

"America is indebted to the Dutch, rather than to the English, for the essential principles of the great free school system of the country, and that, in the several most important steps which have marked the establishment and the development of that system, New York and not Massachusetts, has led the way." Mr. Martin can be safely left to any defence of Massachusetts school-keeping. My purpose here is to refer to this able essay as a pronounced illustration of a method of presenting a historical thesis which leaves out history and brings to the front the method of the advocate.

The brilliant Mrs. Caroline Kirkland of New York, once characterized a distinguished clergyman of that city as,—"A man of magnificent mental deficiencies." With no disposition to analyze the mental structure or review the distinguished educational services of Superintendent Draper, the pamphlet in question seems to me far more remarkable for its omissions than its assertions. Indeed, so oblivious to the few historical facts on which the early and even the present status of the American common school hinges is Superintendent Draper, that his elaborate and forcible presentation has no positive historic or critical value; but is simply a skillful plea, whose animus alone stamps it as an unimportant contribution to the question in hand.

The first notable "deficiency" is the absolute ignoring of the political history of England and the educational history of Scotland in the assertion that "America is indebted to the Dutch rather than the English for the essential principle of the American free school." Here the term "free school" is adroitly substituted for *American common school.* Superintendent Draper endorses the suggestion of Rev. Dr. Griffis; — that England is mainly indebted to the advent of a few thousand Dutch immigrants in its north-eastern counties for the great movement on the lines of civil and religious liberty that overthrew the Stuarts and with occasional back-sets, has produced the England of to-day. Guizot wrote a generation ago that England was the only European nation which had a constitutional history to write. The Dutch Republic no longer exists and Holland is to-day essentially a part of the continental monarchical system. It certainly required something more than a few ship-loads of Dutchmen three centuries ago to account for England and her mighty children;—to-day the world's main reliance for civil and religious liberty. The Scottish people, at the

period of the Puritan departure for Holland, were already at work on the educational lines that converge to the American common school. The New England emigration included the most progressive of Englishmen. Mr. George Sumner, after careful investigation on the ground, disposes of the theory that the Pilgrims of the Plymouth Colony, in their eleven years residence in Leyden, were in any essential way influenced by their environment. With the allowance that must be made, in all estimates of nationality, for mutual dependence, the present American common school is as truly an evolution from the progressive British idea as our republican form of government. This absolute ignoring of English and Scottish influence alone removes this paper from the category of genuine historical investigation.

The second "magnificent deficiency" of this essay is a complete ignoring of the type of civilization established by the Dutch in the valleys of the Hudson and the Mohawk. It was the most intensely aristocratic, even feudal, in its relations to the masses, ever established on American soil. No Virginian planter ever possessed the power over his slaves, held by the Dutch "Patroon" before the English occupation. Whatever may have been the provisions of the superior class for the free schooling of their own families anything resembling the American common school would have been as impossible on one of those great estates as a graded school system on an old-time South Carolina plantation. Superintendent Draper follows Doctor Griffis in charging upon the English settlers the putting out of the great light which, like "Liberty enlightening the World," flared up during the early years of New Amsterdam. Neither of them explain the process by which the masses of the Dutch tenantry in Eastern New York, as late as fifty years ago, were among the most illiterate white people of the North; adhering to the Dutch language in their churches and more thoroughly sunk in political corruption than even Tammany to-day. The superior class of Dutch descent, were in full accord with the ecclesiastical and social resistance to the common school which kept Eastern New York half a century behind New England in its development. In 1856 the capital city, Albany, with its distinguished group of famous men was satisfied with a public school system inferior to a Massachusetts town of two thousand people; was dependent on Dr. Eben Stearns and a brilliant corps of New England teachers for its only superior

school for girls; and, later, called Master Bradley, from Berkshire county, to establish its famous free high school. The one state normal school, there located, was under such local ecclesiastical influence that its ablest teacher, afterwards president of a state university, and to-day a scientist of national reputation, was forced out of his position for the crime of attending a so-called unevangelical church. Only within ten years has the common school system of Brooklyn, N. Y., emerged from its subordination to the private and parochial school idea. The "Public School Society" of the city of New York was formed to offer to its poorer class of children the only opportunity of inexpensive schooling. The only explanation of the New York of the Hudson and Mohawk valleys is that, for two hundred years and more, it was an intensely aristocratic region; the superior families of Dutch descent holding their own; but the masses of their countrymen never having enjoyed even the too meagre opportunities of the New England people. This romance of the putting out of the great Dutch light by "perfidious Albion" is very well as a brilliant period in Mr. Chauncey Depew's annual speech at the Knickerbocker club, — only, it isn't history.

Even more astounding is the singular ignoring by Superintendent Draper of the New England influence in New York. At the close of the Revolution, for half a century, New York, west of Utica and north of Saratoga, was filled by the best young Yankee blood. Indeed, until the later influx of the new European emigration, in all characteristic ways it was dominated by New England influence. Young Seward left the valley of the Hudson to find the constituency in Western New York from which he organized the grand army which, for the last forty years, in politics, religion and education, has been the defence of the people against the reactionary tendencies of the eastern valleys. A score of names could be mentioned who, following the great lead of Horace Mann, planted the common school so thoroughly in this new soil that, out of it, came the splendid uprising of the past thirty years that has given the state its name and fame in common school affairs. Here have been planted the six splendid state normal schools, whose influence has been so powerful through the new west. Here was the fit soil for the first university that fought its way out of the thicket of New York sectarian collegiate

opposition. And here, to-day, is the reliance of the Empire State for its deliverance from the insolent rule of "Boss" politics which holds high carnival at Albany, and meets out, to the only New York superintendent of instruction of national reputation the state has known, official decapitation. The early inauguration of normal instruction and state supervision paraded in this essay, was simply the conferring on the New York secretary of state the additional labor of building up the common school in the face of the cumbrous administration by the ancient and honorable "Board of Regents" and that subsidizing of country academies for normal instruction which has developed the most bitter hostility to the entire system of state normal schools. "The wonder grows" at every line of this essay, how the supreme official of the New York common school system should be so near-sighted to the New England of his own generation, and so far-sighted to the Dutch of two centuries ago in his estimates of the forces of popular education in New York.

But the most conspicuous of the magnificent historical deficiencies of this presentation is the adroit method by which Superintendent Draper seeks to turn the flank of Mr. Martin's position concerning superintendents and compulsory education in Massachusetts. Fully dominated by the continental, European idea of the state as the supreme power in education, it is easy for a lawyer, politician and administrator so accomplished as Superintendent Draper to fancy he sees nothing worthy the name of supervision or compulsory education in Massachusetts. He seems never to have heard of the town "school committee" which, when properly worked, is the most effective and practical system of local supervision; of the power of unlimited local taxation which has built up a school attendance, expenditure of money and general interest in education which has practically abolished illiteracy in the native population and given to the children of two or three generations of Irishmen such opportunites as no American state has been able to rival; that under the modest title of "secretary" has given to the state, Mann, Sears, Boutwell, White and Dickinson as state superintendents, with the present distinguished city and district officials of that name; that has placed in the schools of the state more than a third of normal trained teachers, in place of one-fifteenth in New York; and that through its labor laws

has the only effective system of compulsory education, the New England system, in the country. While Superintendent Draper is calling aloud for a high commission to devise something like the Imperial European system of compulsory education, Massachusetts has, virtually, her entire school population receiving instruction. In fact, the continental way of pushing children into school with a bayonet and moving the whole educational machine by a crank in the state house does not commend itself to the American people. In the late report of the National Bureau of Education, Miss Anna Tolman Smith, in a few pages, has stated the English idea of local as opposed to the Roman continental idea of Imperial supervision in a way that lights up the "dark country" Doctor Draper imagines Massachusetts to be. "The proof of the pudding is in the eating." The answer to the Draper theories is — Massachusetts and her educational influence in the Republic.

In closing, I can only hint at the style of special pleading by which Superintendent Draper works out his picture of the Massachusetts of the first one hundred and fifty years as a hide-bound, sectarian aristocracy, working an exclusive system of schools for its own perpetuation while the people were starving for the bread of knowledge, and his equally realistic conception of the educational Massachusetts of to-day. The absolute incapacity to look below the surface of New England life and account for the prodigious power which in '76, brought the New England people to the front and has kept them there in every great movement for the civil, religious, social, literary and educational advancement of the nation, was never more painfully illustrated than in this remarkable essay. The New York of to-day needs no such disparagement of the Massachusetts of the past and present as this, to vindicate her proud position as the head of the forty-four American commonwealths. The Empire state is not represented in this by her able superintendent of instruction. It was fitting that the pamphlet now circulating should have been printed in the *Educational Review*, which signalized its first issue by elbowing off New England education to the tail of the national procession. Editor Butler and Superintendent Draper must try again.

SCHOOL SUPERVISION.

LOUIS J. BLOCK, PRINCIPAL OF THE ANDERSEN SCHOOL, CHICAGO.

LIKE all things in this world that we admire as it moves around us, the supervision of schools is a growth and an evolution. The office of a leader, whose purpose is to take general charge of the system, has been brought into being by the development of the system. The manner in which such an office will do its best work will also distinctly show itself in the due process of time; the limits within which it should be held, the relations which it bears both to its superiors and subordinates, the truest form of its utility and activity, are gradually unfolding realities, which we shall come to know as the hours pass on in their inevitable and increasing procession. In the smaller communities perhaps it is well not to be too ready to introduce the complications required by a rapidly advancing population; but everywhere the need of an intelligent and consistent supervision of educational efforts is felt, and the application of tests which shall be just is the subject of eager and interested discussion.

Supervision ought to be a benignant and healthful activity, its business is to build up and not to destroy. It should not be confounded with that sort of watchfulness of a teacher's performance, which seems to take for granted that the latter's moral sense still remains in a latent and half-evolved state, and requires to be supplemented by a more energetic process, existing in the soul of the sleepless guardian. There is a supervision, unworthy of the name, which does unmitigated harm to the interests supposed to be conserved by it; the subordinates, who are as its hands and instruments, are deprived by it of all force and life, and sink at last into sheer mechanical obedience to directions which they no longer care to understand. The supervisor's first duty is to learn the capabilities of his assistants, to respect their strength and ambition, to undertake no reckless invasion of their freedom, to have faith in the goodness of men, and to remember that high ideals, earnest intentions, superb industry, noble successes are not the inalienable appanages of the class of instructors to which, by the grace of fortune, he happens to belong. Supervision is not

altogether the general's arbitrary dictation of what is needed to be done, although in the establishment of an effective *esprit de corps* the element of obedience to simple command must not be wanting. It is rather what the term etymologically denotes, an oversight of the whole field of operations from a higher point of view, a consequent directing of forces with a unanimity not attainable by those occupying the lesser horizons and the more limited opportunities. The supervisor holds in his grasp the many departments; he should be able to conjoin the many efforts and bring to pass results to which all have contributed, but whose entireness is his especial privilege, and whose harmonious achievement is his reward. Genuine supervision must not omit from the vision, the *super*, which is the enjoying of a higher plane in the educational problem, and the resulting right to give coherency and unity to particularized activities.

The occupancy of this higher plane implies a good many things. The meaning and the work of education ought to be seen from it in larger and more emphatic measure. It may seem a barren truism to say that the supervisor should have a knowledge of education in all its elements and movements, and yet the statement is to be made. This knowledge can be neither too broad nor too profound. The leader should be able to rise into the highest idea of his labors, and draw his inspiration from the clearest fountains. One result of the extraordinary successes of the restless and ambitious life that we see around us everywhere is to undervalue the toil of the student, and elevate in place of it the sort of heterogeneous information which comes of heaping together the conclusions of a daily experience. In the pressure of the multiform duties claiming our immediate attention, we have to devote a somewhat scant leisure to pursuits that are intrinsically higher. We are inclined to relegate intense studiousness to idealists (so-called), whose function in this work-a-day world seems mainly to be to write books which nobody has the time to read. A supervision, however, which is systematic must have well-grounded principles, which are not to be shifted at the bidding of every vagary that shoots from nobody knows where into the educational sphere. It ought to be based on something firmer than a series of maxims culled from an experience of greater or less extent, and should be something more than a sentimental adhesion to a few favorite opinions to the exclusion of much else that is,

to say the least, of equal value. Well-grounded information, a system evolved from the study of many systems, unification of the thought of the past, belong to it as a secure and sufficient foundation. There supervenes the influx of the new theories and the new purposes; the vociferous supporter of a scheme which he affirms to be the only and the all-dominating leaps into the arena and many are at once willing to throw away the old and the tried and adopt the novel and the startling; valuable time is given to the working out of experiments superficially brilliant, and far from permanently useful; the genuine ends of the school are forgotten, and a temporary vogue given to what afterwards proves to be effective only in a limited degree. An acquaintance with the history of education often shows us how these very supposititious novelties have been fully tried, their exact value discovered, and their place in education established. A theory, built up by the study of what has been, or having even a deeper and more speculative character, no mere mechanical combination of dead men's views, but a reproduction of the educational life that has so variously embodied itself, will know what to do with the fresh claimants upon its attention, and will understand to what extent it has before it only a recrudescence of what has had its day and departed, or in what measure it is obliged to reconstitute its ideal to meet the needs of the advancing generation. We shall not yield anything which has been found valuable and won its place after the customary struggle, nor shall we be unready to admit those additions to our resources, which are being constantly discovered, and which are the reflection of the progress of the century in the domain of the school.

Ideals, however, while they are the presuppositions of all systematic procedure, and are, therefore, the source of all permanent achievement, behold over against them the realm of the real, which they are to mould and transform. There is the vast realm on which they are to exercise their transfiguring might and a thorough acquaintance with the special material is indispensable, as an artist must have knowledge of the stuff, whether color, or stone, or words, in which he works. The man who is best acquainted with the instant needs of the school-room, who stands closest to its questionings and trials, often trivial, but not, therefore, the less perplexing, who has trod the pathways, many and divergent, through these very questionings and trials, has a good

deal in his favor. He can go into any of his class-rooms, take the reins from the teacher, and drive the chariot around the columns more evenly and rapidly than the regular urger to speed and victory. Competency in his own person to place before the teacher a representation of her whole business, which will receive her unqualified approval, nay, admiration, is an instrument worth possessing. Moreover, there is the outer world; authorities above and patrons below. Playing fast and loose with legitimate directions will not be found a wholesome influence under which the plant of obedience will generously thrive and blossom. Discriminations based upon the wishes of patrons whose friendship is desirable will not be conducive to successful achievement. The wide field of a thorough acquaintance with the real conditions of the problem requires careful husbandry, in order that the seeds of a nobler ideal may be sown therein, in order that the best and truest may come to appropriate fruition.

As the supervisor holds the place of vantage, which brings into one view all the departments, he has a function distinctly his own, and an oversight which is his peculiar privilege. The teacher sees her own room and her own pupils; she is anxious for their progress according to her best light and knowledge; she has received them from influences which are not precisely hers, and is to pass them on into those which are different again. The unification of all these interests without infringement of individual liberty and the abatement of enthusiasm, opens avenues in the direction where the genuine distinction of supervision lies. The school as a whole is the province which is specially given him to make the most of, and his spirit will be felt as the influence which permeates the endeavors of all, and lends to them the strength which makes them what they are. The note of differentiation has its origin and cause in this influence, which conjoins the many into healthful oneness. Into his plan of operations all that the captain knows and is will flow as into a fertilizing fountain whence spread the streams over the adjacent plains; the adjustment of that plan to environing conditions will demand practical skill and harmonizing insight. The ambitious must not be repressed, and yet not allowed to overleap the limits imposed by the situation, and the more timid encouraged and their contribution received perhaps with overpraise. The supervisor's task is to bring together all these elements, to make them conform to the ends

desirable, and like a brain in a human body, furnish the subtle and wide-wandering essence which converts the differenced members into an organic whole, possessing meaning and life and consciousness.

There are many means to the attainment of these objects. In the inspection of work a great many things are to be taken into consideration. Above all, results, adequate and solid, must make themselves clearly apparent. There can be no excuse for the waste of the pupils' time and energy. The fuller, the wider these results, the better, and in the activity arising from a teacher's interpretation of her duties and the principal's larger expectations, a growth will ensue that will open investigations profitable to both. No one believes that the schools are doing all that they can, and more time is spent in getting work done in certain ways than is required for completing it in the first place if left to less artificial methods. No teaching, however superficially brilliant and captivating, has any right to be, if on the tree of its annual growth, the autumn does not find the rich and perfumed burden which it ought to bear.

In general the experienced and thoughtful teacher may be left to devise her own methods and appliances. Yet not wholly; it may be true that all roads lead to Rome, but some are unquestionably better to travel than others, and the knowledge of those who have finally arrived after the usual tribulations requires to be taken into account, and the most direct and rapid route is the one to be chosen. If one always had in every room teachers of superlative excellence, of finished scholarship, of generous sympathies, and that firmness which combines in due degree the seriousness which belongs to authority, and the flexibility which the organism to be developed, young, wayward, noble, generous, calls for so strenuously, methods of instruction and management might with all safety be remitted to their high and active ingenuity; there would yet be left a wide range of supervisory labors; even under such imaginary circumstances, consultation and conformity to a general standard would demand a central and ultimate decisiveness somewhere. In the actual posture of affairs, a rudimentary sort of Normal school has to be established in every school-house, and the best intentions are often defeated by the crude and ineffective instruments furnished for use.

The subject of examinations has been receiving considerable

attention of late. They are no certain indication of intelligent scholarship; many pupils find it impossible to overcome a nervous timidity on their occurrence, and in consequence do themselves small credit. Anyone who has looked over papers submitted by adults on a matter about which they assuredly ought to know everything, wonders where the evident fault is, in the meagreness of information or the blundering fashion of testing it. And yet, however much the good old custom of regular examinations may be falling into disuse, we shall probably make up our minds not to throw away with too ready rashness the opportunity an examination affords of finding out whether the work assigned has been fully and rationally accomplished.

Connected with examinations are promotions. Fasten them as little to mere times and seasons as is possible. Why hold back rapid minds on account of some notions about the length of time which it takes to go through so much arithmetic, or geography, or history? The specially endowed have a right to complain if they are not advanced when they are ready; the privilege of getting as far in the year as they can is theirs; no man, making a journey, would like to wait for laggards, whose delay is mainly blameable on themselves. An inspection of classes can be made at frequent intervals and the re-arrangement thus brought to view put into effect without hesitation. One is not to be deterred by abstract notions in regard to thoroughness; if one is to wait until certain ideals of so-called thoroughness are brought from their nebulous condition in the brains of their fabricators forth to stellar actuality, the usual period allotted to education will have vanished into the abyss prepared for everything that has gone through its useless days and belongs to a past whose romantic aspect is only paralleled by its absurdity.

In the making of suggestions to teachers, there appears to be no plausible reason yet assigned or assignable, why they should be regarded as persons of small intelligence to whose opinions no deference, however trifling, is due. No one has yet succeeded in preëmpting all the wisdom available, and the assumption of supreme infallibility is apt to excite something of dissatisfaction. Nor is it always imperative that the suggestion be presented in the form of a negative and rather contemptuous warning against the doing of certain things, evidently enormous offences, or they would not be spoken of as they are. The statement may be

mingled with a recognition of success where it is due, and an appreciation of earnest and persistent effort. Everybody is to be aroused to the sense of thoroughly understanding his business, and looking for new and improved ways of disposing of it. Suggestions, it may be remembered, emanate from rational beings, and deserve rational consideration, and everything depends on the development of a sensible and assured self-confidence.

Teachers' meetings are places for free discussion. Every word or hint, coming though it may from the least expected quarter, deserves due reception and attention. Monologues from the same eloquent sources in the same impressive manner come to be at last a sheer monotony, a tiresome burden, and lead no whither. The genuine educational bearings of subjects can be made clear; again, no one need be alarmed at the vague possibility of being too psychologic, or too historical, or too profound after any kind or fashion. Profundity is not a disease from which mankind in general suffers, and no absurder mistake was ever made than to believe that learning makes men mad, or that to know things in their entire extent disables one from energetic action, or that the genuine student is an unpractical being. The barrenness of so many meetings arises not from the abundance of matter presented, but rather from the slim and meagre entertainment afforded.

Work well and honestly done may be displayed and a spirit of generous emulation aroused and stimulated. The recognition of excellence ensures its continuance, and latent enthusiasm is thus called into overt activity. Visitations are to be made, but in making them the distinct understanding is that they have a definite purpose and intention; they are for more than seeing a programme smoothly gone through with. One wishes to know how certain difficulties are successfully met, how a specially gifted person gains specially fine things in her new and finished way. Of what value is desultory visiting or simply admiring inspection? The inexperienced require to be told what to look for if they are sent without a competent guide into a school-room, no matter how well conducted.

We hear a great deal about poor teachers; perhaps we ought to hear a great deal more about poor supervision. It is hardly chivalrous to strike those who have limited means of defending themselves, and hitherto the supervisors have mainly had the floor and the talk to themselves. Nevertheless, if unprepared and really

poor teaching forces are by various combinations brought into the school-room, the supervisor's part of the labor is something more than to fret and fume, and leave the candidate to the slow death induced in the end from her own inabilities. His place is in the breach and fore-front of the battle, and, with his sympathetic courrage, he may often, perhaps alway, bring at least a negative victory from what seemed total rout. He may ward off harm if he cannot produce unmitigated good. Poor teaching is a less serious evil than poor supervision, and the ridiculous spectacle of scouring a whole country side for so-called good teachers is only matched by the woful lack of judgment displayed in the selections finally made.

The formation of teachers into classes for genuine study is an invaluable agency in exerting a deep and permanent influence. What is chosen is not so important as that something is chosen; the world of knowledge like its material symbol and representative, is a sphere, and may be circumnavigated from any starting point. Important above all is it that the study shall be in a worthy and mature manner. These classes are not to be fed on the weak and diluted mixtures concocted for immature minds in the ordinary text-books; if literature is selected, the great and permanent productions are to be read and commented on, and no precious privilege thrown away on the lesser and relatively unimportant. When Goethe knocks at the door, we have no time to give even to Bryant or Dickens. The high is not necessarily the difficult; the book on science is easier to read than many a recent realistic novel, and the world of permanent truth throws open its hospitable portals with a music ravishing all souls to the lightest touch of the sincere seeker.

In the end one returns to the beginning. Inspiration, courage, vigor, descend from above. The life of the body is in the soul, and all lower things depend upon the high and the noble. Supervision is the oversight; it has its fountains in a just and lofty understanding, which communicates its fervor and wisdom to all who come within the radius of its influence. To enliven, to fill with ideals, to give wings to thought, and speed to act, belongs of right to those who lead and guide. Confidence in them rests on the fact that they are the mediums for the dissemination of a light which burns in them clearly and radiantly. Their torches must be illumined at the highest of sources, and must be as free

as possible from mere earthly fumes and obscurities. In a school as in any department of life, the most joyous of functions and the most useful of arts is to give strength to hands that would otherwise be weak, to give heart to motives that would otherwise be dull and uncertain, to give light to hopes and imaginings that would otherwise be lampless, depressed, insecure, feelingless.

EDITORIAL.

WE have such a press of matter upon our columns this month that the space usually devoted to editorials is much abridged. But, in view of the number of exceptionally choice articles herewith offered to our readers, they will doubtless bear this lessening of editorial utterance with equanimity.

REV. FRANK H. PALMER, a man of fine literary instincts and with pedagogical and editorial, as well as ministerial experience, will henceforth devote himself to the interests of EDUCATION. His name is now associated with the writer's as a partner in the business, and as associate editor of the magazine. The aim of the editors and publishers of EDUCATION will ever be to make it more and more valuable and helpful to every reader, and to advance the great cause of education. We make no special promises for the future, but will let each issue of the magazine speak for itself. The constituency of EDUCATION is steadily increasing, and we trust this will continue for many years to come. Thanking you for all past assistance and inviting your coöperation in advancing the great interests to which this magazine stands pledged, and bespeaking your kindly interest in Mr. Palmer as he gives himself to the accomplishment of these ends, the present editor bids each reader — Godspeed. And so we go forward.

WE begin the publication in this number of EDUCATION of a very valuable series of articles entitled "Notes on the Principles of Education." The author, Rev. M. MacVicar, Ph. D., LL. D., is the accomplished superintendent of the educational department of the American Baptist Home Mission Society in New York city. He writes with the ease and skill of a master, and these notes cover the entire range of principles of teaching and methods of instruction. They are published in the form in which they have been delivered in the lecture room, and are the fruit of patient research and close, logical thinking. After reading much of the manuscript, Dr. William T.

Harris has given it his hearty endorsement. He says: "I think that what Dr. MacVicar writes will prove to be edifying reading to the teachers of this country, — East and West, North and South, — not only for the clearness with which he lays down principles, but more especially for the practical wisdom with which he handles the questions of the school-room."

A VIGOROUS movement has been inaugurated by Col. Albert A. Pope, of the Pope Manufacturing Co., to secure a comprehensive road exhibit at the World's Columbian Exposition. It is proposed to have a separate building devoted to the exhibition of improved roads and road-making machinery, such as stone-crushers, steam rollers, street-sweepers, watering-carts, etc.; and, if possible, to show actual examples of perfect roads and the processes and materials of their construction, in different parts of the Exposition grounds. We thoroughly indorse these efforts in the profound conviction that good roads have a vital relation to the physical, moral and intellectual, as well as commercial welfare of the people. Probably no man has done more than Colonel Pope to educate the public in regard to this subject, and we hope that the proposed exhibit will be all that he desires.

A VERY important bill is now before Congress which we most earnestly hope will be enacted. It provides for the creation of a board to be known as the Board of Regents of Education of the Indian and Oklahoma territories for the purpose of promoting the industrial and academic education of Indians. It empowers this board to hold property, real and personal, buy, lease and sell land and chattels, receive gifts, etc., and to incorporate industrial, academic and other higher institutions of learning. Certain sections of land are to belong to this board; but the aggregate sum is not to exceed 1,000,000 acres. This land is to be sold for the purposes of Indian education. The bill is wisely and carefully drawn, and if it becomes law, will result in incalculable good. The author of this bill is Dr. MacVicar of New York. It has received the hearty endorsement of General Morgan, General Whittlesey, Dr. Wm. T. Harris, Herbert Welch and other distinguished friends of the Indian and of education.

IT is proposed to hold throughout the country a National Columbian Public School Celebration in connection with the World's Fair, upon Oct. 12, 1892. There are 13,000,000 scholars in our public schools. They are to be called upon to vote that their respective schools shall enter the celebration, and are to appoint local committees composed jointly of citizens, teachers and scholars. This committee will have charge of the local arrangements, but the general committee,

consisting of all the state superintendents of education, will furnish the official programme. Each state superintendent has the responsibility of pushing the plan in his own state. The programme will include an ode, a popular carol and a brief oration. There will be a religious recognition in the programme, in accordance with the spirit of our forefathers, whose first act upon landing was a religious one. The entire plan strikes us as an excellent one. The public school is a characteristic institution linking all neighborhoods into one great chain, and such a celebration will do much to teach the children history, and impress upon them the great lessons of patriotism and gratitude for our wonderful national development.

The *Youth's Companion* has been very active in bringing about this celebration. An executive committee, of which Francis Bellamy of that paper is chairman, and the other members of which are John W. Dickinson of Massachusetts, Thomas B. Stockwell of Rhode Island, W. R. Garrett of Tennessee, and W. C. Hewitt of Michigan, has published a valuable "message to the public schools of America," from which we have only space to quote briefly: —

"The 12th of October, 1892, the 400th anniversary of the Discovery of America, ought to be observed everywhere in America. The day will be marked in Chicago by the dedication of the Columbian Exposition grounds. The day also may be signalized in every town and village in the Republic by a local celebration of which the public school is the centre. The public schools of the Republic will form the most fitting centres for all these local celebrations. * * * *

On October 12th the stars and stripes should be floating from every schoolhouse in the Republic. It is the hope of the friends of common school education that not one public school in the United States will allow itself to be left out in this most memorable celebration."

CORRESPONDENCE.

Editor of EDUCATION: —

In an editorial in the January number of EDUCATION, you state that one of the things that the people of the United States will not do is, "to reconstruct the primary and secondary departments of the public school system to meet the demand of a group of university men." Are your readers to infer from this that you are opposed to the introduction into the grammar schools of the study of geometry, algebra, French, etc.. as recently advocated by a gathering of noted leaders of educational matters? The papers commenting on the report and its

startling innovations, gave for the most part, unqualified approval of the proposed change, and I have heard no serious objections offered against the measure. I have been on the lookout to discover in the educational journals some discussion or attack on the report, expecting that some of the conservative schoolmen would rise to give it a smart rap, but I have seen nothing. I sincerely hope the report and recommendation will receive consideration and extensive comment.

Massachusetts. TEACHER.

Editor EDUCATION: —

I have taught in high schools and academies in New England cities for the past twelve years, and I am desirous of making a change which will bring me nearer the goal of my ambition. I am a college graduate and can furnish gilt-edged testimonials of my ability, scholarship and success. So far, I have received all there is for me in the schools outside of the large cities. I believe I can do satisfactory work in a city school, and my purpose in writing you is to ask your advice as to the best means of procuring a position in Boston, in one of its high or Latin schools.

Connecticut. F. J. R.

Your letter bears the stamp of good faith, and it deserves consideration. Places in Boston are not to be had for the asking, and your excellent work in a small school in the country will not make you a very formidable candidate for any of the positions that may be vacant. If you have won success in your calling by honest and hard work, you need have little fear that you will pass unrecognized. School officers are ever on the alert to secure the very best the country affords, and your local reputation, if it is substantial, will secure for you respectful consideration. It does not follow, that because you have succeeded in your school you are the man for any other school. Success depends largely on conditions and immediate influences. In another school you might not secure that unqualified success which has thus far attended your efforts. It is far better for you to bide your time where you are, putting to good advantage the time you have on your hands for extra study, and then by easy stages move towards the larger cities. The most eminent and successful teachers are by no means to be found in the largest cities. Do not entertain the idea that your life will be but partially a success if you do not round it out with work in Boston or New York. Be assured, however, that when you are fitted for the work which the large schools in the cities require, you will not be passed unnoticed, if your abilities merit your securing any of these positions.

FOREIGN NOTES.

Work of the London School Board. — The magnitude of the educational work which the London school board has in hand, is suggested by the statistics of population. According to the census of 1891, "Greater London" has a population of 5,633,332, which exceeds that of any one of the United States (census of 1890), New York alone excepted. If we confine our attention to "Inner or Registration London," we have a population of 4,211,056, which is still exceeded only by two of our own states, i. e., New York and Pennsylvania. This immense aggregate of human beings furnishes a school population including the infant school period, of about 800,000, or 600,000 of ages 5 to 13. For the management of the elementary schools in which provision is made for instructing these children, there is a board of fifty-five members, having in its employment above 10,000 persons, and disbursing annually about $10,000,000.

The elementary school provision in London, as in England generally, comprises board and voluntary (i. e., private schools). Both classes share in the government grant, but board schools only have the benefit of rate (i. e., local taxes). From this source is derived above $6,000,000, or more than half the total income of the school board.

The board has under its control 410 schools, divided into 381 departments for boys, 371 for girls, 382 for infants and 37 mixed, i. e., for boys, girls and infants together. In September, 1891, these schools enrolled 448,107 children of all ages. The enrollment in voluntary schools was about 260,500, or a total enrollment in government aided schools of 708,607; of these, eighty per cent. were above five years of age. The average enrollment for 1890 was 653,932. The average attendance, all ages included, was seventy-eight per cent. of the average number enrolled. The board of inspectors report that "the great difficulty with which the majority of the teachers in public elementary schools have to contend, is irregular attendance." In the board schools an "average attendance" of something like eighty per cent. of the number on the roll appears to have been pretty nearly a fixed ratio during the past decade.

Omitting causes which come more immediately under the cognizance of the by-laws committee, they have to point out that one of the chief reasons for the generally unsatisfactory nature of the attendance is the character of the teaching necessary to pass the dull and irregular chil-

dren through the standards. The instruction is often so given that these children, at least, can take little pleasure in receiving it, and their school lives are not happy. The newest regulations and instructions issued by the Education Department seem to afford an opening for a great effort at improvement in this respect. The teacher will be no longer under a necessity to expend his best energies in making the dull child duller, and the irregular child less regular by the daily grind at dolorous reading of monotonous spellings and mechanical sums. The freedom of classification promised, sets the teacher free to adopt such winning methods and such interesting work as will make the school bright, cheerful and attractive, even to the unwilling scholar. In the future the child's mind need not be filled with a mass of undigested facts stored up for use in the forthcoming examination; but, unfortunately, to be forgotten as soon as the need for it has gone by. The teacher may now substitute scientific mental training founded on nature's laws, and thus make the teaching as attractive to the wastrel as it has hitherto been the reverse.

One important factor, then, for an improved attendance is more interesting and attractive teaching, but there is a second factor of scarcely less importance, viz., the presence of sympathy. A practical teacher who had spent four months in visiting American schools, on being asked what point in the interior economy of these schools struck him most, replied, "The great sympathy which exists between the teacher and the taught." "Nowhere in England," he added, "have I seen the children put such entire confidence in the teacher, or the teacher in the children, as in the schools in the States." This may be a somewhat sweeping generalization, but certain it is that in the past, our children have been treated too much like the pawns on a chess-board — not of much account in themselves, but useful in winning the examination game.

In 1890, with an average enrollment of 443,143 children, the board schools employed a force of 7,166 adult teachers and 1,546 pupil teachers, or a total of 8,712. Of 377 head masters, 312 were receiving an average annual salary of $1,365, and sixty-five, who stand at the very head of the teaching profession, an average of $1,615. Of headmistresses, there were 315, with an average annual salary of $1,020, and fifty-one whose average was as high as $1,235. As regards the classification of pupils, it appears that only twenty per cent. of the whole number were above standard IV. These figures dispose effectually of the charge that the London masses are in danger of being over-educated.

Mr. Joseph Diggle, who had been chairman of two successive boards

covering a period of six years, has just been reëlected to the same position in the new board, whose sessions began Dec. 3, 1891.

In a summary of the twenty-one years' work of the board, just completed, the chairman made the following statement: —

"In this period of twenty years, the population has increased by 28.8 per cent., and the civic wealth of London by 65 per cent.; so that, whereas, in 1871, a precept of 1d. in the pound of rateable value produced £83,200 ($416,000); in 1891, it produces £137,800 ($689,000).'

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"In 1871, it was estimated that there were 104,000 children for whom school places were not provided. In 1891, a school place exists for each child who is subject to the law of compulsory attendance. The cost of obtaining this large public school property has been $42,195,000, of which, during the same period, $5,650,000 has been repaid, leaving an unpaid debt upon this account of $36,545,000. The yearly payments for interest on, and repayment of this loan amount to $1,982,500, which is equivalent to a rate of 3d. in the pound of the present rateable value of London."

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"Since 1870, not reckoning the amount of loans repaid, a sum of not less than $60,000,000 has been raised by the ratepayers of London alone for the maintenance of the schools and for the general administration of the work of the board. It is impossible to say how many children have passed through the schools in these years; but they must be numbered by hundreds of thousands, and probably exceed half a million."

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"During the period of 1870 to 1891, there has been an extraordinary diminution of juvenile crime. For notwitstanding the growth of the population in the interval, the number of juvenile offenders is only 3,872 in 1891, as against 9,998 in 1870. Of course the establishment in 1866 of industrial and reformatory schools has had much to do with this result; and it may be that many juvenile offenders who are now subjected to the reforming influence of industrial schools, would at the earlier period have been punished by prison discipline, and perhaps have inevitably fallen into the ranks of criminals. But when full weight has been given to these considerations a considerable margin of good still remains, which may largely be attributed to the elevating influence of good public elementary schools. There are evidences on all sides, that the average culture of the community has been distinctly raised. Good literature commands a more enlarged circle of readers, and the spread of public libraries, still more the inexpensive editions of standard works, are tokens of this wider taste."

The latest departures of the board have been in the provision of special schools for the instruction of children feeble in mind or body, and of technical or manual training. Under this head the chairman observed: —

"The liberty to provide manual instruction which has been recently conceded by the Code, has enabled the board to conduct classes at the cost of the school fund, and they are now at work in seven schools similar in aim to the six central classes, which the generosity of the Draper's Company and the city and guilds of London Technical Institute have enabled a joint committee of these bodies and the school board so successfully to carry on for the past four years, and which, I am glad to know, will be continued by the exercise of the same wise generosity. The experiment recently begun of teaching housewifery, conducted by the same committee, may, if it should prove to be practicable upon a large scale, have the effect which their previous experiments in manual instruction and laundry work have had of encouraging the framers of the government code to offer for the choice of managers of schools, a wider range of industrial subjects."

BELGIUM.

The private university of Brussels has just completed its fifty-seventh year. It has an attendance of 1,685 students. The section of social sciences which was opened in 1889, offered in 1891 five winter and two summer courses. Two of these courses were upon the relation between the natural and social sciences, four were upon the history of ideas and of systems in social matters, one series of lessons was devoted to the history of the penal system, and another to that of the political institutions of England. M. Goblet d' Alviella conducted a course in the evolution of the principal primitive religious institutions.

The university of Liège numbered 1,383 students in 1891, distributed as follows: philosophy, 223; law, 338; sciences, 305; medicine, 282; special schools, 235. Of the total, only 143 were foreigners. The intellectual force of the professors is indicated by the great number of their publications, which amounted to 240 last year.

Chairs of homeopathy are to be created in the Belgian universities.

GERMANY.

The seminary of Oriental language in Berlin numbered sixty-one members in the summer semester for 1891. The teaching corps comprised thirteen persons.

Recent statistics show remarkable prosperity in the superior technical schools of Berlin. The total number of attendants has reached

1,534, of which, all but 378 were matriculates. All the countries of Europe, excepting only France, were represented. There were also fifteen American students and four from Japan. The teaching force of these schools comprises sixty-two ordinary masters, thirty-three *privat docentén*, and ninety-five assistant professors, of whom, forty pertain to the section of architecture. The technical schools of Stuttgart and of Bavaria show like prosperity.

Universities of Austria. — The five German universities of Austria were attended by 10,560 students in the summer semester of 1891. The details were as follows: Vienna, 6,371; Prague, 1,643; Gratz, 1,384; Innsbruck, 890; Czernowitz, 271. A faculty of theology has been created at Prague. A. T. S.

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned.

Babylonia under the Greeks and Parthians. J. E. Gilmore. *Historical Review*, Jan. The period referred to is interesting as having witnessed the dying out of the cuneiform writing and the language for which it was used, as well as of the ancient religion of Assyria and Babylon, and the rise in the same district of the Talmudic development of Judaism and of several curious semi-Christian sects.

Beast and Man in India. J. E. Kipling. Reviewed in *London Quarterly Review*, April. Cruelty to animals is common in the East as in all nations. The Hindoo worships the cow, and as a rule is reluctant to take the life of any animal except in sacrifice. The sect which cares for the animal hospitals is small and is the object of a good deal of popular sarcasm.

California, The Deserts of. *Chambers's Journal*, March 12. These are along the route of the Southern Pacific railroad; they are fast being narrowed by irrigation and wells.

Civil War in England, The great. M. W. Whelpton. *Westminster*, March. "Cromwell is a familiar figure—gaunt, stearn, rough. Though his character is much debated, he is hardly, now, the consistent hypocrite of some years ago. His many changes of policy were really due to his acceptance of his stern teaching of facts. Experience taught him to use any instrument that seemed fittest for his purpose."

Finland. E. A. Freeman. *Macmillan's*, March. "The relation of Finland to Russia is a relation of Home Rule, of a dependency of a state which has a separate constitution in all internal matters, but which has all external matters settled for it by another power."

French Newspaper Press, The. Edward Delille. *Ninteenth Century*, March. The French press is essentially literary and artistic. All the Paris papers are open to novel literary matter. Young writers of anything that is new have opportunities for getting it into print.

Jasmin. *London Quarterly Review*, April. An interesting account of the life and work of this barber-poet of Gascony. He created the written Gascon dialect. His life, spent in his native province, was a protest against the excessive centralization of France. Saint-Beuve said of him: "If France had ten poets like Jasmin, she would have no need to fear revolution."

Language, The Universal. C. R. Haines. *Macmillan's*, March. French

and English are the competitors for this position. "The *amour propre* of France was recently hurt by the readiness of the astronomers of the world in taking the meridian of Greenwich as the scientific meridian for the whole world. Let her console herself with the thought that her decimal system, with its jargon of Gallicised Greek will in all probability force itself upon a reluctant world. But the sceptre of languages has passed forever beyond her grasp and has become beyond all doubt the heritage of English-speaking races. English is spoken by nearly twice as many people as any other European tongue. In this respect, French does not even hold second place; German is before it, and Russian."

New Stars. J. N. Lockyer. *Nineteenth Century*, March. "New stars, whether seen in connection with neblæ or not, are produced by the clash of meteor swarms, the bright lines seen being the low temperature lines of elements, the spectra of which are most brilliant at a low stage of heat."

Russian Famine and the Revolution, The. S. Stepniak. *Fortnightly*, Mar. The writer predicts a revolution in Russia before long and says that the army could not be depended on by the government. After the students of the higher schools, the army is the class that has yielded the greatest number of men punished for political offences.

Settlement in Pennsylvania. A Strange. *Chambers's Journal*, March 26. A description of economy, a German settlement on the Ohio River, "a Rip Van Winkle in the midst of an earnest active civilization." The founder conceived the idea of amassing wealth, not for his own use, but that it might be placed at the disposal of Christ at His second coming!

Sir Henry Wotton: Gentleman and Schoolmaster. Foster Watson. *Gentleman's Magazine*, March. He is the type of the successful all round man trying his hand at the education of boys. Isaac Walton says of him, that he "was pleased constantly to breed up one or more hopeful youths which he picked out of the school and took into his own domestic care, to attend him at his meals; out of whose discourse and behavior he gathered observations for the better completing of his intended book of education: of which, by his still striving to make the whole better, he lived to leave but part to posterity."

Soldier, The Building of the. James E. Pilcher. *United Service*, April. On the importance to soldiers of gymnastics and physical training; skill and endurance in walking, running, jumping, vaulting, climbing, swimming, walking on horizontal beam, singing are all useful and often indispensable to him.

Telephone and Postoffice, The. Duke of Marlboro. *New Review*, March. In England the government has bought the telegraph and attached it to the postoffice, and so it opposes stealthily the introduction of the telephone.

Village Life. T. L. Papillon. *Macmillan's*, April. "The one thing wanting to the restoration of the agricultural industry (in England) is a permanent rise in the price of corn. Till this is reached, wages must be low: so long as wages are low men will migrate to better themselves; and not even Village Councils or Disestablishment will make village life happier or more attractive."

Village Life in France and England. W. Tuckwell. *Contemporary*, March. Comparison of the French and English villager; in France he can own land and is induced to be more saving. The writer argues for more self government in the parishes. "Home Rule is no less necessary in England than in Ireland."

Women, The Physical Sensibility of. C. Lombroso. *Fortnightly*, March. The Italian criminologist has compared women and men in the various expressions of feeling. He regards women as less sensitive than men, enduring physical pain better.

J. P.

HANDEL'S MESSIAH.

ELIZABETH PORTER GOULD.

The giving of the "Messiah' at Music Hall, Boston, on the evening of Wednesday, April 13th, by the Handel and Haydn Society, celebrated the first performance of this great oratorio, in Dublin, one hundred and fifty years ago. Handel, in his nearly five months' residence in Dublin, had already delighted the people by giving twelve subscription concerts. His compositions, such as the *Utrecht*, *Te Deum*, *Jubilate* and *Coronation* Anthems, had been known for some time in the city, through annual performances at St. Andrew's, in behalf of the Mercer's Hospital. Thus known to the people, they were particularly interested to read in their *Faulkner's Journal* the following announcement, concerning his new work the *Messiah*, which he had composed in twenty-three days, only a few weeks before he had left England for Ireland.

"On Thursday next being the 8th inst. (April 1742) at the Musick Hall in Fishamble street, will be the Rehearsal of Mr. Handel's new Grand Sacred Oratorio called *The Messiah*, in which the Gentlemen of both Choirs will assist, with some Concertos on the Organ by Mr. Handel. The doors will be opened at eleven, and no Person to be admitted without a Rehearsal Ticket which is given gratis with the Tickets for the Performance when paid for. Tickets to be had at the Musick Hall and at Mr. Neal's in Christ Church yard at Half a Guinea each."

A "most Grand, Polite and Crowded audience" attended the Rehearsal, which gave "universal satisfaction." The following Monday, April 12th, was the day set apart for the concert. But that being Cathedral day, at the "desire of several persons of Distinction" it was put off to the following day, Tuesday the 13th. The ladies were requested to come "without Hoops" that by "making Room for more Company," it might increase the "Noble and Grand Charity for which the Oratorio was composed." The gentlemen were requested to come without swords. This public announcement of the concert closed by saying, "the doors will be opened at Eleven and the Performance begin at Twelve."

The success of the enterprise can best be seen in the *Faulkner's Journal's* own words.

"Words are wanting to express the exquisite Delight it afforded to the admiring, crowded Audience. The Sublime, the Grand, and the Tender, adapted to the most elevated, majestick and moving words, conspired to transport and charm the ravished Heart and Ear. It is but justice to Mr. Handel that the World should know he generously gave the Money arising from this Grand Performance, to be equally shared by the Society for relieving Prisoners, the Charitable Infirmary, and Mercer's Hospital, for which they will ever gratefully remember his name; and that the Gentlemen of the two Choirs, Mr. Dubourg (the leader of the orchestra) Mrs. Avolio and Mrs. Cibber, who all performed their Parts to Admiration, acted also on the same disinterested

Principle, satisfied with the deserved Applause of the Publick, and the conscious Pleasure of promoting such useful and extensive Charity."

Each one of the three "great and pious Charities," for which it was given, received one hundred and twenty-seven pounds. The ladies, to their honor be it recorded, complied with the request to come without hoops, thus making room for seven hundred instead of the six hundred the then new Music Hall usually held. At the "Particular Desire of several of the Nobility and Gentry," the concert was repeated on Thursday the 3rd of June, with a Rehearsal on Tuesday the 1st. The public announcement of it said, that in "order to keep the Room as cool as possible, a Pane of Glass will be removed from the top of each of the Windows."

This giving of the *Messiah* was the last of Handel's performances in Ireland. After remaining some two months longer, he sailed from Dublin August 13, 1742. The following March the *Messiah* was given in London with "universal admiration and applause." It was finally given as an annual performance for the benefit of the Foundling Hospital in London. These performances, directed by Handel himself to the end of his life, added many thousands of pounds to that Charity. He presented to the Hospital a copy of the score of the work.

The last appearance in public of the great composer, then in his seventy-fifth year, was at a performance of this oratorio, when he played on the organ as usual, in spite of his blindness. This was on April 6, 1759. A week from that time he was dead.

Probably no other composition has been the means of contributing so largely to the relief of human suffering through charity, or given so much elevated pleasure as the *Messiah*. Should not this fact be commemorated in some generous, appropriate way? Could the great Handel, who delighted to give himself for others, be more highly honored than to have an annual performance of his work, April 13th, for some great charity? Or, better still, to have it open to the great multitude who could in no other way hear the divine music.

BOSTON, April 1892.

A DANGER TO OUR TREES.

We have space only for a few facts selected from the Special Report of the Massachusetts State Board of Agriculture, on the work of exterminating the Gypsy Moth (Ocneria Dispar), every word of which is intensely interesting.

More than twenty-one years ago this destructive insect was imported into Massachusetts where, happily, modern science and a liberal spirit in the State Legislature, has succeeded in confining it to less than thirty towns, with fair hopes of its ultimate extermination. The voracity of the gypsy moth caterpillars is so great that they will strip the foliage from both evergreen and deciduous trees of all species, and even eat portions of the twigs. They destroy shrubs, vines and all growing vegetation, even attacking the herds-grass in the fields. From the evidence of trustworthy residents it would seem that where abundant, this insect moves like the army worm, destroying all vegetation as it goes.

Some of the chief means used for its extermination may be inferred from the following figures:

From April 1st, 1891, to January 1st, 1892, 3,591,982 trees were inspected, 213,828 of which were found to be infested, 212,432 cleaned of eggs, 177,415 sprayed, 19,296 cemented, 68,720 burlapped, 12,000 banded; 87,536 buildings and 53,219 fences were inspected. Hundreds of men have been employed under trained scientists, aided by students from the Agricultural College, at a cost in 1891 of nearly $70,000. A small district, North of Boston, is the only part of the state infected, and such progress has been made that if the measures already used are employed a few years longer all danger will be over. When it is remembered that it costs the farmers of the state $76,000 annually to fight the potato beetle only, it will not seem extravagant to make a liberal appropriation each year for a few years to prevent the gypsy moth, which is a thousandfold more destructive, from gaining a foothold.

F. H. P.

AMONG THE BOOKS.

Mr. John T. Prince has given in his METHODS OF INSTRUCTION AND ORGANIZATION IN THE GERMAN SCHOOLS a most faithful and accurate picture of the school methods and devices as exhibited in the schools of Germany. He does not give us second-hand reports but states what he himself saw and heard. He gives a pretty full account of the organization of the schools, the method of their procedure, and a description of schoolhouses and appliances. This information is valuable and welcome and enables one to understand the superiority of German schools. But to the teacher, the most satisfactory part of the book is the reports of the lessons which Mr. Prince saw and of which he gives full reports. Visits were made to and reports are given of normal, high, private, industrial and elementary schools, and we follow the reporter with his note book in hand as he goes from room to room, from grade to grade, through each school. Reading, arithmetic, geography, language, manual training are fully treated in the book. Mr. Prince has given to teachers a work of inestimable value and it well deserves extensive circulation and careful study. Published by Lee & Shepard.

Of the great churches of Boston there is no one around which clusters more historic and tender memories than the Old South. It is fitting that the history of this noble church be preserved in permanent form. And this has been most admirably done in the two substantial volumes prepared by the genial, scholarly clerk of the Old South Church, Hamilton A. Hill, and published by Houghton, Mifflin & Co., in 1890. In these 1290 pages is spread out the HISTORY OF THE OLD SOUTH CHURCH from its inception in 1669 to the installation of the present pastor, Rev. George A. Gordon,—a powerful and convincing preacher, and a man of broad and deep sympathies,—on April 2nd, 1884. This church was born in troublous times and out of sharp differences of opinion. The original members numbered twenty-eight men, who had withdrawn from the First Church for this purpose. The first pastor was Rev. Thomas Thacher, who was born the year the Mayflower came to Plymouth. He died in 1678. Among his successors there have been such grand men as Samuel Willard, Thomas Prince, Joseph Sewall, Joseph Eckley, Benjamin B. Wisner, George W. Blagden, and Jacob M. Manning. The diary of Samuel Sewall and all kindred sources of in-

formation have been drawn on with rare skill and judgment in judicious selection. The result is that he who reads these volumes not only gains a full knowledge of all that appertains to the Old South Church, but also a birdseye survey of Boston for two centuries.

BUTLER'S BOOK has been awaited with interest. Its distinguished author, General Benjamin F. Butler, has been for nearly half a century a commanding figure in state and national affairs. As a lawyer, as a general, as a congressman, as a governor he has attracted the attention of men by his bold and uncompromising attitudes. Few men living have received so much praise and censure; have been so loved and honored by friends and hated and detested by enemies. Men do not feel lukewarm towards General Butler. He has a host of staunch defenders; he has multitudes of life-long enemies. In this massive volume (it contains 1154 large pages) is a full record of his life and achievements. He came of a warrior race. His father was a captain in the war of 1812 and his grandfather served under Wolfe at Quebec. Benjamin was born at Deerfield, N. H., on November 5, 1818. His mother's name was Charlotte Ellison, the daughter of a soldier. As a boy Butler was an omnivorous reader. At the age of ten his mother moved to Lowell and with this city his name has since been associated. After fitting for college in the high school he went to the Baptist college at Waterville, Me., with some thought of entering the ministry. Graduating at the age of twenty, only weighing ninety-seven pounds, he took a sea voyage, gained twenty-five pounds, and then began the study of law in the office of William Smith, Esquire. This was early in the fall of 1838. Two years later, in September 1840, he was admitted to the bar. On May 16, 1844, he married Sarah, daughter of Doctor Hildreth of Dracut, a young actress. She died in 1877. Of their four children one died in infancy, another, Lieut. Ben Israel, died in 1881, aged 27; the other two are living. They are Blanche, born 1847, now the wife of General Ames, and Paul, born in 1852. Butler soon became noted at Lowell as a politician and a militia officer. In 1851 he is Colonel Butler; in 1852 the workingmen elected him to the Legislature and in 1858 to the Senate. In 1857-'60, having been made a brigadier-general, Butler commanded several thousand militia troops during annual encampments. No wonder he was ready to march instantly at the call of Governor Andrew, in April, 1861. His war record at Baltimore, Fortress Monroe, New Orleans, Bermuda Hundred, Fort Fisher, and other places is a matter of history and known of all men. He devotes 750 pages to a pretty full recital of his connection with the Civil war, in which he did not prove himself to be one of the great commanders. This book is the record of a man of great abilities, indomitable energy and perseverance and colossal egotism. He has impressed himself upon the political and military annals of our country. He has won a vast fortune. He stands forth as the defender of the poor. He has achieved great distinction as a lawyer. His political following has been great. He is a powerful antagonist and an enemy to be feared. This book will call forth rejoinders. He has done scant justice to some of the great commanders of the Civil war. There is a sting in many of his statements about other public men. It can not be said that *gentleness* hath made Butler great. This book despite its blemishes has decided merits and contains much valuable matter. Young men may study it,—all who will may study it, to advantage. It is gotten up in good shape and is well illustrated. Sold only by subscription. The publishers are A. M. Thayer & Co., Beacon Hill, Boston.

THE LAWS OF THOUGHT OR FORMAL LOGIC is a brief but vigorous treatise on the laws and methods which govern correct thinking. The author, William Poland, is the Professor of Rational Philosophy in St. Louis University, and is probably the highest authority on such subjects in any Roman Catholic institution in America. We heartily welcome this able and excellent treatment of abstruse matters in these hundred pages. Doctor Poland does not attempt to furnish forth a Psychology. He "merely enumerates the principles acts of the intellect," describing them only so far as is necessary to "lay down briefly and clearly the process of right thinking." A brief introductory chapter discusses logic and various acts of mind. Other chapters treat of ideas and terms, judgments and propositions, reasoning and argument, truth of the premises and the book closes with a discussion of method. The learner is made to understand each step before going forward to the next. The terminology is carefully adhered to, and the bright youth who *studies* this treatise thoroughly will gain a clear insight into the laws which govern correct and logical thinking. Published by Silver, Burdett & Co., Boston.

THE NEW WORLD, a Quarterly Review of Religion, Ethics and Theology, makes its appearance from the well-known house of Houghton, Mifflin & Co., Boston. This new periodical claims a field of its own in presenting the views of able and clear-sighted thinkers who occupy radically different positions on the subjects treated, but are permeated with a common spirit of loyalty to truth. Among the contributors to the initial number are Lyman Abbott, C. C. Everett, Wm. R. Alger, and C. H. Toy. It will foster progressive, scientific thought in religion and ethics, and will stand for a liberal Christian unity of all open-minded men of every school and of all religions. There *is* a new world of thought and belief, and this magazine will endeavor to be its exponent.

Ben Jonson's "TIMBER," or "DISCOVERIES MADE UPON MEN AND MATTER," has been brought to light and made available to English students by Prof. Felix E. Schelling, of the University of Pennsylvania, in a neat little volume published at 90 cents by Ginn & Co., Boston. One of the most interesting of all questions about a great man is: How does he do his work? In this volume we see one of the greatest masters of the later Elizabethan period in his work-shop, revelling in the literary materials that are within the reach of his hungry mind, reading everything, seizing upon the essence of all that comes within his vision, approving or scorning it, and appropriating to his own uses whatever he needs. It is a great art to grasp and make available that, and only that, which is wanted in the often voluminous writings of others, and to make "Timber" of it. This book shows that the sixteenth century was not without a master in what has often been supposed to be a modern art.

STORIES OF MASSACHUSETTS is the latest volume in the Young Folks Library of American History, from the press of the Educational Publishing Co., Boston. The authors of these sixty charming stories — for everything is told in a delightful way which will attract children — are Mara L. Pratt and Anna Temple Lovering. With the thorough knowledge of children born of practical experience and the skill of trained writers, these ladies have prepared a most interesting book which the children will read and enjoy, and receive profit from. Beginning with the "Coming of the Northmen," the leading events are discussed and anecdotes of famous people told, and pen-pictures of the leading cities and towns given, connecting the fading past with the active present. The book is well illustrated.

WILLIAM M. THAYER.

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

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LIMITATIONS AND POSSIBILITIES OF INDUSTRIAL TRAINING IN PUBLIC SCHOOLS.

CHARLES J. RYDER,

Secretary American Missionary Association.

"He that teacheth not his son a trade, doth the same as though he taught him to be a thief." — *Rabbi Judah.*

THE purpose of the public school is to train citizens. The only justification for the levying of a tax for the instruction of the young is that they are rendered by education more useful and efficient citizens. Any method of instruction in the public schools which does not contribute to this end has no right there. Should the Bible be read in the public schools is a question of great importance. The answer, however, is simple. It should not be read in order to secure proselytes to any denomination. It should be read, if the reading contributes to the development of character and the establishment of honesty and integrity in the future citizens of the country. The same test should be applied to every study in the curriculum of the public school.

Industrial training in our public schools must be judged by the same test. (It ought to have no place there simply for the training of trade workers.) It should have a place if essential for the best training of citizens. There are certain limitations to the introduction of a thorough system of industrial training which it is important to consider.

1. Lack of well established nomenclature, or terminology.
2. Suitable text-books.
3. A well defined purpose.
4. Careful and exact grading.
5. Suitable instructors.

First.—Industrial training can never win its way to a well-established place in the school curriculum until those who are interested in it agree substantially upon terms. This difficulty meets us in the names given to this course of study. We have "Manual Training Schools," "Trade Schools," "Schools for Mechanical Training," "Tool Work Schools," "Technical Schools," as Allan Glen's Technical School at Glasgow; "Hand and Eye Training Schools," "Industrial Schools," "Schools of Domestic Science," and many others. These all refer to schools in which substantially the same studies are pursued. In this hopeless confusion of terminology, it is difficult to get clear, and well-defined ideas before the common people. It seems to the writer especially unfortunate that the term manual training should be so generally used.

The purpose of manual training is to make more skillful and well prepared the future citizen of our country. As Mr. Cable has well said, "Ninety one-hundredths of hand training is brain-training." *This is true.* The only valid argument for the introduction of industrial training into the public schools is that it does develop the mind, i. e., the *man.* The term manual training, therefore, is defective from the fact that it leaves the impression that the hand is more important than the mind, or that it is the only member affected by this course of training.

Then again, it is faulty because bench work, and many forms of industrial training are as much discipline for the eye as for the hand. Mr. George Ricks, one of the School Inspectors of London, has recognized this, and entitled his two illustrated volumes "Hand and Eye Training." In the admirable report of Mr. S. B. Capen, member of the School Committee of Boston, he quotes from the above volume as follows: "Our aim in manual training must be wholly educational * * * we must develop and strengthen habits of attention, industry, and perseverance; and must train the eye to accurate observation, and the hand to dexterity and execution." This quotation shows the inaccuracy of the term *manual* training. Civil engineering taxes the feet and

the eye, but no one would think of calling it foot and eye training. Military evolutions are foot and body training, but we give them no such narrowing names. I believe that the very term "Manual Training" retards the progress of this much needed line of instruction. Manual labor is used as contrasted with brain labor. It is a lower form of labor and requires less intellectual power. Manual training is associated with manual labor, and is at a discount in the minds of many. The term manual training is, therefore, untrue and unfortunate.

The term, trade schools, is also unfortunate, because the purpose of industrial training in the *public schools* is not to teach a trade, but to develop and equip the future citizen. It is also objectionable for the same reason given against manual training. Many do not desire to have their children learn a trade as an end, but would be glad to have them pursue a course that would develop all their powers.

Industrial training is essential to this all-around development. Indeed all this nomenclature which gives a course of training a name taken from any organ or member of the body is especially objectionable. I do not think of any other study which takes its name in this way. It is not in accordance with the natural and accepted methods. It does not follow the analogy of other sciences or studies, and, I doubt not, that much more rapid progress would be made if we could drop these unfortunate terms, and as a body adopt the term Industrial Training. It seems to meet the requirements.

1. It is analogous to the usage in other branches.
2. It is specific.
3. It is dignified and honorable in its suggestion.
4. It is comprehensive, without any stretch or unnatural adaptation of terms.

It includes those branches which are as much eye training as hand training. Such seemingly unimportant and incidental facts as the naming of a comparatively unknown branch of study are really of great importance. Industrial training has got to make for itself a place, and not leap full-grown into the place already created for it. If we can remove the names which are complicating and making more difficult the popular approval of the general system we have gained considerable.

Second. We lack suitable text-books.

Kindergarten, which is at the basis of industrial training in giving a knowledge of forms, colors and combinations, is fairly well furnished with text-books and materials, but when we get above the kindergarten, we have a very imperfect series of text-books. "Bench Work in Wood," the excellent volume prepared by W. F. M. Goss, is one of the best in this department, but it only covers one branch of industry. The two illustrated volumes mentioned above prepared by George Ricks, B. S., and entitled, "Hand and Eye Training," are of course of great value, but are too expensive and exhaustive to be used as text-books. It is safe to say that there is no series of well adapted text-books on industrial training. This is a serious limitation in the progress of this branch.

Third. We lack also a well defined purpose as to what industrial training seeks to accomplish. This has been somewhat discussed under the previous head of "nomenclature," and needs only to be touched upon here. A minister who cannot unharness a horse, or a lawyer who cannot hang a blind, is less of a man and a less efficient citizen than he who can perform these common duties. Rabbi Judah has said, "He that teacheth not his son a trade doth the same as though he taught him to be a thief."

Rabbi Gamaliel said, "He that hath a trade in his hand, to what is he like? He is like a vineyard that is fenced." And the Talmudic writer commands the father "to teach his son the law, and to teach him a trade." Now the basis of all this Jewish instruction was that the Commonwealth of Israel was more stable and secure if the citizen were instructed in some sort of industry. The purpose was not to teach a trade in order to make a tradesman, but to teach a trade in order to make more secure the body politic. Is it not a disgrace to us that we are just beginning to agitate a question that was well established, and established in the right way, in the Jewish Commonwealth before the coming of our Lord? We need to stimulate the same intense regard for the importance of the commonwealth, the common weal; and nothing will affect this more potentially than rounding out the scholar through industrial training and development. This is the purpose of industrial training.

Fourth. Another lack more evident and mischievous is that of careful and exact grading in industrial training. This is natural but very mischievous. In *Primary Schools* we introduce clay-

modelling, paper-cutting, weaving, combining of colors and forms. These are the rudiments of industrial training. When we get beyond the primary school, however, the general system of grading in industrial work is not based upon the qualifications of the pupils in that branch, but rather upon their standing in reference to other studies. We need carefully to grade our industrial work so that there shall be progress and definite results. Let me illustrate. Take a school with which I am familiar. The preceptress of the girl's department found it impossible to interest the girls in the care of their rooms. They were fairly neat and tidy, but with the rush of work and the natural carelessness of youth, they failed to sweep the corners, or to dust as frequently as they ought. She hit upon the following method. The sweeping was to be done by one grade, the younger ones. The dusting by a higher grade. One of the more advanced pupils who had been longer in the school, and therefore had had more training in the domestic department was given in charge of a certain number of rooms. This was practice teaching. The teacher came in once a week, or more frequently if necessary, to see whether the work was well done. If it was not well done, then the girl who had been teacher must become one of the pupils again. This worked satisfactorily, and the work was much more neatly done. It gave them something to strive after and introduced the principle of progress. In another girl's school, sewing was graded in somewhat the same way. For instance, the primary industrial grade included plain sewing on unbleached goods. The intermediate industrial took plain sewing on bleached goods, and more simple forms of fancy work. The second intermediate included the former and more difficult fancy sewing, together with knitting and crocheting, etc. Special attention was also given to darning and mending.

In the first higher industrial grade the pupils had training in cutting and dress-making, confining themselves to the less difficult garments, as aprons, etc. The second higher furnished complete instruction in dress-making, and the use of the sewing-machine. The highest industrial grade reviewed all the previous grades, introducing millinery and the purchase of goods. The teacher took into the stores of the city where the school was established, two or three pupils of this grade and explained to the proprietor her purpose, and asked the privilege of letting the

pupils see the goods and examine them carefully. The result was skill and judgment in the purchase of goods. When these young ladies had completed this course of training, they could cut, make, and mend their own garments, produce fairly respectable and fashionable bonnets, and purchase the household supplies, wearing apparel, etc., without serious danger of being deceived. I mention this to show the possibility of careful and exact grading even in this branch of industrial training. The effect upon the pupils was marked and most satisfactory. There was something to stimulate them in each grade. There was evidence of progress and more still to attain. They were not in a certain grade of industrial work because they chanced to be in a certain arithmetic or geography. They were in a certain grade because they had carefully done the work below that grade. The result of this lack of scientific and exact grading is a great hindrance to the progress of industrial training.

Fifth. There is also lack of suitable instructors. This goes without the saying. It was my duty for some years to look up industrial teachers who should give instruction especially in carpentering. Let any one who doubts what I am about to say try it for himself. About ninety-nine out of one hundred carpenters, skilled and competent workmen, are utterly unqualified to instruct others in their own branch of carpentering. It is one thing to know any principles or facts, and quite another thing to be able to impart that knowledge. We shall have no competent teachers in industrial work until we *produce them through industrial training schools*, The old hap-hazard way of learning a trade is not the method that develops the teacher, who must be exact and careful. Our normal schools must introduce a department of instruction in methods of teaching the industries, if they would keep abreast of the times and meet the demands upon them.

Having thus hastily touched some of the limitations, or hindrances, which stand in the way of the rapid development of industrial training in our public schools, let us notice some of the *possibilities*.

First, industrial training is in keeping with the best modern methods. The tendency of modern education is toward that which is *objective*, rather than that which is *subjective*. The abstract gives place to the concrete. Object lessons are essential to the best school-room work to-day. Many of us remember when

we were children learning by rote endless rules and definitions, the meaning of which we understood very imperfectly, if at all. Take as an illustration the definition given of a cylinder. "A solid body supposed to be generated by the rotation of a parallelogram around one of its sides." A meaningless jumble of words to the average boy until he sees the figure! To-day in our best schools, the definition grows out of the pupil's knowledge. The rule is the result of what he learns from objects, and is generally expressed in his own words. Industrial training is in thorough accord with this wholesome advance in modern methods of teaching.

Second, the intellectual value of industrial training can hardly be exaggerated. Boys that are dull in an arithmetic class, will go to the carpenter's shop, and learn what cubes, and triangles, and planes are by making them, or by drawing them; and in this way they gain an interest in the class-room work, and a genuine intellectual impulse. Drawing is a most essential feature of industrial training, and demands exactness of the eye. This involves correct judgment, for the judgment guides the eye. This produces both alertness and skill.

One of the rules laid down by the Boston school committee in reference to their manual training schools is the following: "The scholars must be given an intellectual knowledge of the principles which underlie their work." The "*intellectual knowledge*" is after all the basis of industrial training. The intellect must be stimulated by the very process. It is taking advantage of one of the laws of the mind, when we give the boy a thing to be wrought out by means of the application of the principles which he learns by using them.

A ship owner in Boston was greatly discouraged that his son did not do better work in his arithmetic in the public schools. To stimulate him, he gave him the size of the schooner that he owned, the height of her mast, and the length of the booms, etc. With these measurements, he asked his boy how much sail she could carry. This was something the boy could appreciate. He had been on the schooner, and nothing was pleasanter to him than a ride in the harbor. He went to work applying the principles which had seemed to him dead and useless, and delighted his father with the exact measurement of her canvas. You accomplish for every boy by industrial training what this wise man

accomplished for his own son by giving him the measurement of the sails on the boat. That is, you stimulate his desire to know, and give him the opportunity to apply principles which he uses as he learns them.

But again, there is great *moral value* in industrial training. There are many illustrations of this. As another has said, "It carries the boy around and over that critical period of his life, when he is too old to be a boy, and yet not old enough to feel the restraints and responsibilities of manhood." It keeps the boy longer in school, giving him something useful to do, and is, therefore, a great moral influence. Let me illustrate by a quotation: "The Lyman school at Westborough is composed of nearly two hundred boys, sent here, most of them, for petty larceny, and they are constantly changing. In the manual-training shop, where the work of all the boys is together side by side, no boy for nine months has been known to interfere with the work of any other, although the temptation for the poor workman to quietly substitute some better work for his own must at times be very great. In the time that this work has been carried on, only one boy out of four hundred has been obliged to be finally forbidden the opportunity to learn, because of unwillingness to conform to the rules. Even to boys who have taken their first steps in crime, there seems to be a fascination about this work which begins at once to develop in them that which is manly and right, and leads them upward to better things. And it is not necessary for us to go outside of our own city for illustrations. The change that has been wrought in some of our own boys is most wonderful. Before the tool-work was introduced they were unruly and almost ungovernable, except by severe measures. Now, all is changed: they have learned the law of exactness, the value of time; there is self-reliance and dignity awakened, and even the suggestion that they may, under certain circumstances, be deprived of their tools, is the severest of all punishments. Furthermore, in the two grammar schools where this work has been done under the best conditions, it has been found that as much was done intellectually as before when the whole time was given to regular studies — a statement that has sometimes been questioned."

This testimony might be duplicated from equally high authority. In a recent interview with General Armstrong, of Hampton Institute, he said: "Industrial training produces a bodily condi-

tion, helpful to study and does more to tone up the morals of the school than any other influence except religious service." Certainly, those who have the responsibility of adjusting the course of training in our public schools have no right to neglect a course of training which strengthens the body, quickens the intellect, and elevates the moral tone of the pupils. All this, as is abundantly proved, results from industrial training.

NOTES ON PRINCIPLES OF EDUCATION.

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II.

10. *During this period the activity of the senses continues, and is accompanied by the development of reflection, and hence of the simplest form of reasoning and of search for the causes of material and immaterial phenomena.*

(*a*). The child touches, tastes, smells and handles everything that comes within his reach, and he cannot do otherwise if he follows the impulses of his nature. These natural impulses should not be put under chains. The child should be left free, and indeed, encouraged to apply all his senses in examining into the nature of his surroundings. To do otherwise is to crush out of him what God designed as one of the most important elements of a strong intellectual and moral nature. There is but one course in this matter. The senses should be gratified, and their exercises guided in such a manner as to form the power and habit of making accurate observations. This cannot be done either by leaving the child free to use all his senses indiscriminately as chance may direct, or by cramping him at once into a scientific mould where the most orderly use is made of each sense. The power and habit of using the senses accurately is a growth — is the product of a gradual and natural transformation of the inherent sense-hunger in a child as an accurate working force. The simple duty, then, of both parents and teachers, is to supply the necessary conditions to produce this transformation.

(*b*). Reasoning, reflection and search for the causes of things in their simplest forms commence with the very first dawn of intelligence; but during infancy the imperfect condition of the brain

and nervous system, and the strong demand made upon this imperfect organism by the process of growth and by the endless variety of new objects presented to the senses, excludes the possibility of reasoning and reflection proper. During infancy, however, the child usually exhausts the enjoyment afforded by simple sports and by the simple use of his senses upon surrounding objects. Hence, in order to have new enjoyments, he is naturally compelled to form new combinations in his sports, and to seek new objects on which to exercise his senses. This condition of things, therefore, makes a demand for a higher order of reasoning and reflection than was necessary during infancy. In this connection it should be carefully noted that the process of reasoning and reflection belonging to childhood is of a concrete nature, and pertains to such subjects and principles as can be illustrated or demonstrated objectively. Hence the course of study during childhood should be confined to what is concrete and experimental.

11. *The child lives in the present; his actions are almost entirely the products of present attractions and repulsions, of present single convictions of right and wrong, or of habits already formed.*

(*a*). The attractions and repulsions which control the child's actions during infancy and the earlier part of childhood pertain largely to the senses. What gives sentient pleasure or pain usually decides the course of action. Hence the system of rewards and punishments so commonly adopted in controlling the child's will. Intellectual attractions and repulsions gradually rise into prominence. As the child enters the period of youth they have a strong influence upon his actions. His volitions gradually become more the products of reason and forethought. His convictions of right and wrong, however, continue to be largely the products of simple principles wrought into his mind by his parents and teachers during infancy and childhood. When a demand for action is made upon him, these principles rise into consciousness and determine the course to be pursued.

(*b*). All motives which influence the will are states of consciousness — such as emotions, feelings and perception of utility, propriety, right and wrong, and so on — which are present at the time the will is to be exercised. These states of consciousness may be either the products of our immediate present surroundings and hence, transitory, or they may be the products of past experi-

ence, principles, or habits, which have been wrought into our nature and remain permanently with us, and which are called into consciousness by present surroundings. In the former case, the course of conduct is literally the creature of present surroundings; in the latter, however, present surroundings have but little to do in determining the course of conduct.

12. *The child's course of conduct in after-life, his character and moral strength, depend very largely upon the method of control adopted by his parents and teachers during infancy and childhood.*

(*a*). This proposition necessarily follows from the position stated in (11, *b*). When the boy, who has been controlled by present enjoyments supplied by an indulgent parent or teacher, passes into less favorable surroundings his conduct becomes strangely changed; the amiable and well-behaved boy in the mother's sitting-room or in the teacher's class-room, becomes all at once unreliable and vicious. This is almost the invariable product of that method of governing children which controls them by simply supplying present gratification.

(*b*). The proposition stated in (11, *b*) points to another method of control. Present enjoyment should not be ignored, yet it should be made simply a means to an end. While ministering to the child's enjoyment, it is the imperative duty of both parent and teacher to see that true principles of action and correct habits are wrought into his being. These he will carry with him as a permanent possession, and they will determine his course of conduct when he ceases to be under the influence of pleasant surroundings supplied by the kind hand of another.

PERIOD OF YOUTH.

This period commences between the ages of twelve and sixteen, and ends between the ages of twenty and twenty-five. The chief points which demand the special attention of parents and teachers are set forth in the following propositions: —

13. *The body at the beginning of this period is in a transition state, and demands special attention in order to prevent mistakes which may result in permanent injury.*

(*a*). New experiences growing out of physical changes make their appearance at the beginning of this period. These experiences in their nature are exciting and taxing upon the nervous energies. They are also accompanied by a strong natural tendency

to sacrifice largely the other vital interests of the body in order that they may be enjoyed. Hence, at this particular stage of development, there is great danger of fatal injury to the body growing out of the violation of simple physiological laws.

(*b*). A large share of the ruinous practices which prevail during this period is the result of ignorance of the fatal consequences accompanying these practices and of the proper treatment of the body. It is therefore the imperative duty of parents, and in case they fail to do the work, then of teachers, to give, at the proper time and under proper restrictions, such instructions as will make plain the evils to be avoided, and as will impart strength and determination to avoid them. Recourse in this matter should be had to the instructions given upon the subject in standard authorities on physiology and hygiene.

(*c*). All concede that the condition of the body affects directly the experiences of the mind. When a man is "blue," it is usually safe to conclude that his digestive organs are somewhat out of order. It is no more true that the body affects the mind, than that the conditions and states of the mind affect the body. The feelings and passions react upon the body and induce courses of conduct which bring upon it disease and ruin. Here it should be carefully noted that physical debility or disease as a reaction from the mind is the result of passive, not active, states of mind — is the result of an over-exercise of the feelings, the emotions, the passions, and not of the intellect, the reason, the judgment. By keeping the feelings and the emotions nearly inactive, a boy or girl between the ages of fifteen and twenty-five can perform, without the slightest injury to the body, far more of what may be called pure intellectual work than is now usually performed in any of our schools.

14. *During this period all the products of the intellectual nature, including the reasoning power, judgment, etc., carry with them the authority of intuitions.*

(*a*). Sense products absorb largely the attention during infancy and childhood. Accompanying this condition of things a gradual transformation is going on. The mind is becoming more and more interested in simple inferences that follow readily from the sense-perceptions acquired. As a result, at the beginning of the third period simple processes of reasoning, such as each mind is prepared for, become more intensely absorbing than even sense-

products. Facts already acquired are now assuming a new interest, and are again looked over and compared, and conclusions reached which were no part of the original perceptions. These conclusions are simple and direct, and hence are necessarily as real to the mind as the perceptions themselves. Consequently they carry with them the same positive authority as the perceptions.

(*b*). As a necessary consequence of the transformation named in (*a*.) a marked characteristic of youth is developed — namely, the habit of drawing conclusions from insufficient premises. This habit is the natural result of the direct method of making inferences practised in infancy and childhood. So strong does it become before commencing a course of training where rigid demonstrations are required, that the mind refuses to recognize as necessary the series of steps on which a conclusion is based. The conclusion is perceived, and in a certain sense as a conclusion, without taking into account in logical order the premises on which it rests. This condition of things is the reason why so many bright children, possessed of marked perceptive powers, strongly dislike the demonstrative sciences. If, however, such children are properly guided by their teachers, they will very soon become intensely interested in the examination of data and premises for the purpose of determining whether the conclusions drawn are legitimate and in accordance with the truth of things.

(*c*.) Other very important characteristics of youth have their origin in the condition of things stated in the above proposition. For example, boys and girls during this period are naturally sceptical, conceited and positive even to obstinacy. They think they know things just as they are, and that there is little to be known outside of what they have examined. This is a legitimate consequence of the peculiarly new and authoritative nature of their present intellectual products. The child's perceptions of the objective-world are intensely real to him. He entertains no doubts regarding them. He looks with astonishment at anyone who would call in question these perceptions. In this peculiar sense the child may be said to be very sceptical. In this third period a similar condition of things prevails regarding the perceptions of the reasoning powers. These perceptions are also new and authoritative, and contain, to the young mind, just about the whole truth. Hence, as in the case of the child, grave doubts, which assume frequently the form of conceit and obstinacy, are

entertained of anything that seems to contradict this authoritative experience. Young men and young women in this good sense are sceptical, conceited and even obstinate; but this scepticism, conceit and obstinacy properly directed and controlled by competent teachers, become most desirable qualities in building a strong and vigorous manhood and womanhood.

15. *The social nature at the beginning of this period commences to assert control, and hence demands the special attention af parents and teachers.*

(*a*). During infancy and childhood the element of sex has played but a small part in the social intercourse of boys and girls. They have thus far associated together in sports and common enjoyments. They have formed attachments growing out of these associations. Now, however, another and more suitable element than sports and common enjoyments determines the attachments formed. Now to the boy the society of girls is becoming more attractive than that of boys, and to the girl the society of boys than that of girls. This condition of things is in the order of nature. The evident duty, therefore, of parents and teachers is to direct and control, not to crush, this inherent and refining natural tendency of our being.

(*b*). The emotional nature and the imagination play a very important part in shaping the social relations and the general course of conduct of this period. It is a common saying, "boys and girls are impulsive." We mean by this that they act from their feelings rather than from the dictates of their reason and judgment. In this connection it should be carefully noted that the emotional nature is exceedingly inventive, and that this inventive power is in some degree universal. There are comparatively few, who, in matters requiring the exercise of pure intellect, are inventive; yet everyone, in matters pertaining to the feelings, possesses this power. This is particularly true between the ages of fifteen and twenty-five. Hence the endless variety of devices by which young people are able to carry out the demands of the feelings and of the heart; hence, also, the importance of supplying the proper social conditions for the exercise and training of this power.

(*c*). An over-exercise of the social nature which draws so largely upon the feelings or emotions is productive of great injury both to the body and to the mind. The effect of such a course

upon the body has already been pointed out in (13, *c*). A similar effect is produced upon the mind by such a course. Rugged and clear thinking, even in the case of what may be called strong and matured minds, soon becomes impossible if the emotional nature is overtaxed. How much more, then, is the intellectual vigor of boys and girls undermined by indulgences in social life and by the reading of sensational books, both of which make a strong draft upon the feelings. Under such conditions they soon reach a point where they spend a large share of their time in a dreamy, passive state. They lose all desire for positive, active, vigorous mental work. This is only one of the many evil results of over-indulgence of the social nature, so commonly permitted and even encouraged by parents of the present time. There is a golden mean in this matter, and parents and teachers should not fail to adopt it, as either extreme is productive of great injury.

16. *The development and training of the moral nature should receive the first attention of parents and teachers during each of these three periods. Under proper guidance all the activities of the intellectual nature may gradually be subordinated as they ought to be, to the control of the conscience.*

(*a*). The conscience is as susceptible of education as any other power of the mind. Its development runs parallel with the development of the intellectual powers. It manifests itself in infancy in enforcing obedience to the simple laws of nature learned through experience. The "*ought to be*" and "*ought not to be*" enters very early into the child's consciousness. Indeed, it accompanies every experience he passes through where he knows that one of two courses would avoid pain or suffering. A mistake is very commonly made regarding the province of the conscience. It is practically restricted by many in its operations to what is known as the spiritual part of our being. Conscience to such has nothing to do with the ordinary exercise of the functions of the body. This is a great mistake, and leads to fatal results in the training of the infant and child. The decisions of the conscience are coextensive with the work of our entire being. They alone settle authoritatively *when*, *where*, *how*, *and for what purpose*, each function of the body and each power of the mind *ought* to be exercised.

(*b*). The development and training of the conscience is usually sadly neglected. From infancy up to manhood, in all matters

pertaining to the intellect, every encouragement is given to independent action, and the results and decisions reached are respected. It is assumed in this case that there is an inherent power in the child to see things as they are that can be trusted. And because of this assumption, such work and exercises are intrusted to the child as develop and train his intellectual powers in a proper manner. The opposite of this course is pursued with the conscience. From infancy up the child is treated as if he had no *spiritual eye*, by which to see the *ought to be* and the *ought not to be*. His parents and his teacher's spiritual eyes are supposed to do all the seeing where the "ought to be" and the "ought not to be" are to be considered. He is expected simply, machine-like, to execute orders without any regard even to the existence of his conscience. Such a course, and it is a very common one, soon dwarfs and warps the conscience so that its authority is little felt or regarded.

(*c*). The proper development of the moral nature demands that the conscience should be constantly called into exercise. Commencing with infancy, the child should be guided so that he will acquire the habit of considering always before doing a thing, whether it *ought* or *ought not* to be done. This habit should not, as is frequently the case, have reference to one or two classes of acts, as for example, obedience to parents and truthfulness. It should be coextensive with the child's activities, including the exercises of the body and of the mind. Here it should be carefully noted that the decisions of the child's conscience have reference to the child's view of the conditions presented. They should be judged and respected as such. The development of the moral nature is possible only by requiring the child to exercise his conscience in making decisions for himself regarding the "ought to be" and the "ought not to be," and to act upon these decisions when made. This course should be pursued from infancy to manhood by both parents and teachers. In all kinds of school-work, as well as in matters of conduct, there should be a systematic, constant, and direct exercise of the conscience. Pupils should not be forced or induced to perform their work, or to pursue a required course of conduct simply by the use of artificial devices, such as marks, prizes, and so forth. These devices may be used so as to secure present results, but they never leave a permanent impression upon the mind which will be of service in their absence in controlling and directing both work and conduct.

TEACHERS' AID TO SELF-HELP.

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GOOD teachers aim to establish self-help. Their ingenuity and patience are often taxed heavily to remove indifference, laziness, slang, deceit, vulgarity, irreverance and other barriers to success. Their place must be occupied by mental alertness, studious habits, graceful diction, moral transparency and reverent action, as well as the spirit of honor and justice. It may be comparatively easy to sweep the house clean and even to garnish it; but to introduce angels into it, that other devils worse than the first may not come in, is more difficult. Yet, this must be done. If young aspirants are under the spell of evil spirits, that spell must be broken before they can advance at all in self-helpfulness. How shall it be done? How can it be done? Joshua Bates, who was master of the Brimmer school, Boston, thirty-three years, said, at the close of his long service, "There is no part of my professional career that I look back upon with more pleasure and satisfaction than the practice I always pursued in giving, each Saturday morning, familiar talks on such subjects as would conduce to make my pupils happier and better men. I have been more fully assured of the benefit resulting to many of my pupils from letters received, and conversations I have had with past members of the school, who uniformly write or say, 'Much of what I studied in school is forgotten; but the words then spoken are treasured and remembered, and they have influenced, and ever will influence, me while life lasts.'" Mr. Bates was a teacher of character and tact, and he possessed personal magnetism, also; all of which contributed to impress his influence upon his pupils.

It is evident that a teacher finds wide scope for his tact and observation in his calling. His pupils have not more need of these elements of success than he has to guide them thereto. They will serve him better, often, than his learning. It is related, that, at one time, the spectators in the British House of Commons became very troublesome when the officer in attendance attempted to clear the galleries for private sessions. Both doors were opened

at once, and all lingered, because the first to go out would be the last to return when the doors were reopened to let them in. For this reason, the officer was fifteen minutes, often, in removing the crowd of spectators. One day he displayed his tact by deciding to open only *one* door for their exit, and the other, when the House was ready for their return. Under this arrangement everyone wanted to be the first out, because the first out could be first at the other door to return. Three minutes was ample to clear the galleries by this simple device. Here was the exercise of tact. Doctor Abbott illustrates the value of tact to a teacher, as follows: —

"A college officer assigned lessons which the idle and ignorant members of the class thought too long. They murmured for a time, and at last openly complained. The other members of the class could say nothing in behalf of the professor, awed by the greatest of all fears to a collegian, the fear of being called a '*fisher*,' or a '*blueskin*.' The professor paid no attention to the petitions and complaints which were poured in upon him, and which, though originated by the idle, all were compelled to vote for. He coldly, and with uncompromising dignity, went on: the excitement in the class increased, and what is called a college rebellion, with all its disastrous consequences to the infatuated rebels, ensued. Another professor had the dexterity to manage in a different way. After hearing that there was dissatisfaction, he brought up the subject as follows:—'I understand, gentlemen, that you consider your lessons too long. Perhaps I have overrated the abilities of the class, but I have not intended to assign you more than you can accomplish. I feel no other interest in the subject, than the pride and pleasure it would give me, to have my class stand high, in respect to the amount of ground it has gone over, when you come to examination. I propose, therefore, that you appoint a committee in whose abilities and judgment you can confide, and let them examine this subject and report. They might ascertain how much other classes have done, and how much is expedient for this class to attempt; and then, by estimating the number of recitations assigned to this study, they can easily determine what should be the length of the lessons.' The plan was adopted, and the report put an end to the difficulty."

If the magnitude and difficulty of the teacher's work does not sufficiently appear from the foregoing, it certainly must appear

from the multitude of requirements which educators insist upon. There are six works of standard value before us, from which we glean the following rules for teachers, stated mainly in our own language for the sake of brevity: —

Aim to produce self-governing beings.

Avoid occasions to disorder by organization.

Make scholars believe that your authority exists for the good of the governed.

Never be angry with pupils.

Do not put pupils under too much restraint, nor too little.

Trust voluntary dispositions, but no others.

Impartial judgment is indispensable to a teacher.

Do not make too many rules, nor too few.

Put yourself in the place of your pupils.

Secure order without corporal punishment, if possible.

Lead dull pupils to study by appealing to the higher motives.

Take care of the *health* of your pupils.

Take care of the *morals* of your pupils.

Never worry, nor be discouraged.

Exercise gentleness and patience, but be firm.

Allow the largest liberty consistent with the highest success.

Prevent faults before you punish them.

Treat scholars as their temperaments dictate.

"The *minimum* of punishment is the *maximum* of qualifications."

Insist upon neatness of person and dress.

First of all, make your school pleasant.

Never scold, nor ridicule; other people can do that.

Be courteous and polite, equable and sunny.

If things go wrong in school, see if you yourself be not the cause.

Teach your pupils the right way to learn. Instil into their minds a love for knowledge.

Teach orally, largely, — use text-books wisely.

The teacher should be an intelligent physiologist.

Do not excite the nervous system of pupils too much.

"The teacher should be well versed in human nature."

He should know the power of conscience and how to reach it.

His *example* should be pure — out of a pure soul.

One of his highest qualifications should be, just views of education.

Cultivate all the powers at once, physical, mental and moral.

He should prepare himself for every lesson he assigns.

Avoid routine, always secure attention, and use intelligible language.

"Make up mind in the school and in the district."

Visit the parents of your scholars, and be agreeable.

Use unusual events to make deep moral impressions.

Be a constant reader. The best teachers grow daily.

Be industrious; avoid overwork.

Remember that it is physical sin to break down your own health.

These are not all the printed rules for teachers, by any means. They are ample, however, to show that it is no mean task to guide pupils into self-help. Indeed, the rules indicate that the greatest work male or female ever performs, is to qualify himself or herself for teaching. He or she who can be a real guide of girl or boy into self-help, exhibits tact, circumspection, observation and general ability, that win honors in the forum or field. President Garfield was a renowned teacher in this respect, and the qualities that served him well in the schoolroom, served him well in war and in Congress.

That we do not exaggerate the magnitude of the teacher's work, in the cultivation of self-help, is evident from the laws of different states. The law of Massachusetts is,—

"It shall be the duty of the president professors and tutors of the University at Cambridge, and of the several colleges, of all preceptors and teachers of academies, and of all other instructors of youth, to exert their best endeavors to impress on the minds of children and youth committed to their care and instruction the principles of piety and justice and a sacred regard for truth; love of their country; humanity and universal benevolence; sobriety, industry and frugality; chastity, moderation and temperance; and those other virtues which are the ornament of human society and the basis upon which a republican constitution is founded; and it shall be the duty of such instructors to endeavor to lead their pupils, as their ages and capacities will admit, into a clear understanding of the tendency of the above-mentioned virtues, to preserve and perfect a republican constitution and secure the blessings of liberty, as well as to promote their future happiness, and also to point out to them the evil tendency of the opposite vices.—[*Revised Statutes, Sect.* 10, *Chap.* 38.]

In Maine, teachers are required by law, "to use their best endeavors to impress on the minds of children and youth under their care the principles of morality and justice, and a sacred regard for truth; love of country, humanity, and a universal benevolence; sobriety, industry and frugality; charity, moderation and temperance; and all other virtues which are the ornaments of human society."

The same is true of other states, showing that the civil law not only fills the hand of the teacher full of work, but also directs it towards self-help. The teachers who can fill this bill for the Commonwealth which they serve, must be the most industrious and persevering of men and women, as well as the fortunate possessors of tact and abilities worthy of any positions of honor and trust.

REVISION OF THE MICHIGAN COURSE OF STUDY.

SUPT. STUART MACKIBBIN, M. A., MARSHALL, MICH.

(*Concluded.*)

THE revision which we have recommended for the grammar grades will bring a boy up to the high school well equipped in all essentials and with a saving of six hundred recitations, from the time of the sixth, seventh, and eighth grades; to this may be added two hundred and forty by reducing geography from five to three recitations per week in the fifth, sixth, and seventh grades, — as is done in the Bay city schools, — making eight hundred and forty recitations, equivalent to a daily recitation for four years and two months, or four recitations a day, and one additional recitation per week for a year. And yet we are told there is not a sufficient time for the introduction of Latin or modern languages into the grammar grades.

Coming now to the high school we find two hundred and eighty to three hundred and forty recitations, fully half of the first year, devoted to English composition, arithmetic, grammar, and United States history; this, after these subjects are required for admission to the high school.

This saved time can be still further augmented, and the quality of the work done vastly improved by a closer classification of

pupils according to their ability to do work as evidenced by work done, a matter we cannot discuss in the limits of this article, but which every superintendent will admit to be desirable and declare to be impossible, but which, nevertheless, is entirely possible. We are also of the opinion that the old fashioned academy, in which a boy studied what he needed, in which the aim was education not cheap graduation; education suited to the tastes and needs of the pupil and not solely to the entrance requirements of some college; and the old fashioned district school, — now, alas! fast disappearing and giving way to the so called "graded district school" which, like the civilized Indian perpetuates all the vices and none of the virtues of its prototype — are types of schools far better suited to the needs of the times, to developing the bright pupil, and not crushing the slow one, than is the modern "graded school," which places all the children who enter school any year in a class together and arranges for them to tread the same path, an idea as ridiculous as for a horse trainer to suppose that all the colts brought him in any year, will trot in the same class.

Would that the old school-master Chiron might innoculate with some of his "horse sense" the "normal" superintendent, who, with barely a high school education himself, has university graduates to manage his high school, and with special teachers on every conceivable subject, divides his time between drawing his salary, resisting innovation, and in assuring his admiring board that their schools were never in so prosperous a condition! How fortunate that Hercules and Jason and Æsculapius had only a "district school" education, for had they fallen into the hopper of the modern educational mill, a second-class prize fighter, an amateur yachtsman and an itinerant patent medicine vender would have been the result.

To return to the theme. What is a high school? The popular answer is "The People's College"; practically, it is mere university preparatory school. What determines the curriculum? According to the laity, the needs and abilities of the community; practically the university admission requirements. So deeply rooted is this idea, that it is heresy to advocate the teaching in a high school of any subject not found in these requirements, or in any course, no matter how much time there may be, to teach more than the bare requirements in that course. The argument that such subject is not required at Ann Arbor is supposed to be unanswerable.

The university has four courses of study, viz.: — Classical, philosophical, scientific, and letters, (or English as sometimes called), besides extras, with a more or less different set of requirements for each. A high school to be in good form, must have these four preparatory courses, and it is customary to offer all the options allowed in the requirements, so that the four original courses are swollen to nine, to which must be added a two years' course dignified by the high sounding phrase "commercial," and sometimes a normal course goes to swell the aggregate. And then how many times do prospective high school freshmen come to us and tell us they are not satisfied with all this array and that a select course will be more to their tastes. Such a banquet of electives is impossible, and absurd were it possible. A mere comparison of the weekly or daily recitations required with the number of teachers employed can hear, shows the — to put it plainly — dishonesty of such display catalogues. The traditional western city "on paper" is no comparison to some of our paper high schools. Were this the only evil that flowed from this high school stretching, it might be treated as a matter of amusement and passed. It is argued that the optional studies are not given unless elected by a reasonable number, and so no harm follows. Then what is the use of offering liberty and surrounding the offer with such restrictions as to make the offer a farce? And while this statement is true as regards elections within a course, it is not true as regards the elections between the courses themselves. A course once chosen must be carried through, though no more than one remains in it, and its distinctive class or classes must be maintained for the benefit of that one; and we repeat and emphasize that, leaving out all electives in a course, considering simply the straight courses, the average high school cannot begin to teach the classes it advertises.

The university is not to blame for this state of affairs. It exists for Michigan as a whole, and in fact for several other states as well. It must have the broadest possible range of admission requirements, and whether these are grouped in different courses, or, as is the case at Harvard, in essential and elective requirements, with maximum and minimum in each, matters not. A high school is not thereby required to stretch itself beyond its limits.

The classical entrance requirements are four years of Latin,

though three and one-half are ample, two of Greek, though the lessons and three books of the Anabasis ought to be done in one and one-half; seven-tenths of a year in history, two and three-tenths in mathematics, one and three-tenths in science, three-tenths in English, viz.:—rhetoric not including the reading classes in English classics styled half-hours in English, which are usually considered as extra to the regular couse. On the basis of a year of two hundred days, the above calls for 1,920 recitations, or 2,120, if the maximum time be given to Latin and Greek. Three recitations per day, for three years and two months, in one case, or for a fraction over three and one-half years in the other, are ample. The requirements for the philosophical course demand about the same time. The scientific preparatory requires about three and one-fifth years' work. The English course requires 1,920 recitations, including three hundred and forty in grammar school English, a course which can easily be finished in two and one-half years of as hard work as the classical preparatory requires These courses are, in the high schools, all padded out with grammar school subjects to four years.

A very small part of the time which we have shown can be saved in the grammar grades, given to the beginning of Latin in the eighth grade, will leave but three years' work for the high school, and if no more than bare requirements are to be done, the course should be cut down to three years with consequent saving of pupil's time and tax-payer's money. The result should be, however, that enough more work be done in the high school and grammar grades, to cover all the work of the freshman year, and the time of university residence reduced to three years or even less. When we consider the immense loss of time, fully two years in the present course, surely this is not impossible; surely two years' loss retrieved, ought to result in one year's gain.

So far we have discussed the question of revision, as have others who have treated this subject, with sole reference to the bright boy who goes to college. We now wish to consider the much larger class, the bright boys who stay at home.

To arrange a course of study for this class is far more difficult than for the preparatory; but in two things all will agree: first, that no time is to be wasted; second, that the course should be as broad, as complete and as comprehensive as possible, regardless of what is or what is not done at college or university, This "fin-

ishing" course, as it might be termed, will include "language," not a language, "as the great instrument and condition of all culture, civilization and thought; mathematics and sciences, as a most valuable drill in deductive and inductive reasoning, and also as furnishing practical knowledge useful in any department of life; the history of man, as showing his relation to humanity, past and present: and lastly as the crowning and completion, philosophy, under the departments of psychology; of logic developed on the one hand from grammar and rhetoric, on the other hand from science and mathematics; and ethics, in the fields of individual and political action."

While we have shown the possibility of doing the freshman work in our high schools, we do not argue that it ought to be done. We believe in the broadening of high school work in the present limits, rather than in extending the limits and trenching on those of the college. Better to do the entire range of preparatory work in one course than to give fragments of it in different courses. Take the classical preparatory as the basis, and allowing maximum time, viz.:—2,120 recitations; add thereto the number of recitations necessary for the subjects in the other courses not found in it, and the total will require five years five and one-third months; add two hundred,and begin Latin in the eighth grade, and the whole can still be done in less than six years; add another two hundred, and begin Latin in the seventh grade, and still but six and one-fifth years are required. If Greek be not required, its time can be given to German, giving four years to that language, or to French.

Such a course from the "finishing" standpoint needs no defense; as a preparatory course, it will be far better than is the present incomplete arrangement of bare requirements; perhaps it will not give as much advance credit as if the time were concentrated on the requirements of some particular course, but it will give the kind of advance credit any college ought to be glad to give,—if the sole object of improving preparatory work is merely specific advance credit,—advance credit in the elements of different subjects. The classical student with six years of Latin ought not to go up with over a half or three-fourths of a year credit, the rest of the time would be well employed in bettering the preparatory work, but he would have two years of German or French, a half year each of two or three sciences, for these are but duplicates of

university courses required of students who do not prepare in these subjects in high schools, while United States history and government should be required of every high school graduate; for it, as well as some of the sciences, if not studied in the high school, probably never will be. The graduate in such a course will in the university also receive a credit not always shown in marks, viz.; — that which will come as the result of broad and thorough preparatory work, and long continued preparatory training. Such a course will need but little variation, in fact there should be but little; the excessive specialization of higher instruction renders necessary a more general culture and training in secondary schools, unless indeed our educated men are to become specialists and nothing else; educated specialists and not educated men.

We do believe, however, in a division of public school courses, but the election must come in a different place and be made on a different basis from what it is at present. To decide when and how the division is to be made, let us consider the school system as a whole. At the bottom is the primary circle; here, no differentiation is necessary, though methods must vary according to the pupil, the elements of an English education can and must be taught in the four or five years of this circle. In the last few years great improvements have been made in this department. Every year better pupils are going up to the grammar grades to be employed in treading old straw under the plea of thoroughness. The improvements necessary in this primary circle are less babying; less prepared infant's food and more solids; less "developing" and more drill; less fearfulness that the darlings will be overworked, and more employment for idle hands and minds; less of the idea that their attention is liable to be strained — with consequent developing of frivolousness by short fifteen or twenty minutes' recitations, — and more of the discipline that comes from a prolonged and concentrated effort of attention; less developing of "latent faculties" and more teaching to read, to write, to spell, and to cipher. When this primary circle has been finished and we have before shown that it is practically done at the end of the fourth or fifth year, then is the time for the division of the roads. Those who are to go on through, who desire a general education whether "finishing" or preparatory, will travel the one route, those whose education is to be practical, technical, industrial, will

travel the other and receive treatment suited to their needs. Such a course will include the English studies, history, mathematics, science, a modern language if desired, manual training, book-keeping, typewriting (?) etc., and can, in any case, be developed as far and made as complete as necessities demand and circumstances will permit.

In opposition to this view of an early division, it is argued that it requires an election to be made too early in life. This we hold to be no objection. Which route the pupil will travel is, in nearly all cases, determined even before he enters school; determined by his mental limitations, determined by his parent's circumstances, determined perhaps by the fact that he must "earn his bread in the sweat of his brow," and no amount of florid rhetoric can change the fact. The very fact that all children in school are upon an equality, demands that each child shall receive the training his individuality needs. It is objected to the "spiral" arrangement, that it encourages pupils to leave school; but the fact remains that they leave just the same. It is argued that a pupil may choose one course and afterwards discover he has made a mistake. In such case, let him cross over. This argument is as valid against the election system in college as in public school. One other objection advanced by a very eminent authority in public discussion, is less an objection, than a curiosity. It was said that the terms primary, grammar, and high school had come to have such a well defined meaning in pedagogy, that great confusion would arise from changing the scope of any of these departments; and the going of a Michigan boy to another state, as Oregon, and the difficulty of classifying him in case our grammar schools were enriched was especially mentioned. Therefore, because of the inflexible terminology of an artificial and pedantic pedagogy, and because somebody may move to Oregon, the children of Michigan schools are to waste two years of their time!

In conclusion we admonish him who is objecting to change and arguing to let well enough alone, to "Heed the signs of the times." The question is shall we revise the schools or have the schools revise us? The more or less celebrated message of Governor Flower, while but partly true, is one of these "signs." It is not the rant of a pot-house politican, but the deliberate judgment of a clear headed business man. While the increased cost of public schools is in many cases necessary and easily accounted

for, and while the increase in school taxation is perhaps no greater than the increase of municipal taxation generally, the gains in solid results are not in proportion to the increased outlay. The public, the intelligent, thinking public sees this and inquires the cause. People tax themselves willingly, excessively, for all laudable public purposes, but they expect something to show for the money; when they do not receive it, they are apt to be as unreasonable in the other extreme. Everything, in a material way necessary, has been given and given lavishly, and no one is more free to form and execute plans and to attain results than is the American superintendent, if he will only think so. It avails little to have skilled workmen and poor tools. The much quoted adage that the teacher makes the school is but a half truth; just as often the school makes the teacher. Mark Hopkins and his log form a pretty picture, but the log would have become very monotonous even with the inspiring presence of New England's great teacher, were the pupil to have been kept threshing straw and winnowing chaff. There must be a change in our ideals. Good teachers, abundant apparatus, extensive libraries, are all good, but the system must have a soul and not be a car of Juggernaut. We must have a liberal education that is liberal, a practical education that is practical, and an industrial education that is industrial and not the neither-one-thing-nor-the-other which we at present have.

This question of revision is not theoretical but practical. It is a problem superintendents must solve, each for himself. The revised course of study must be worked out, slowly, experimentally, under the restrictions of local conditions, it cannot be imposed from universities nor formed by copying that of the gymnasium or lycèe. The American school must be worked out on American soil, by American ideas, by American men, remembering that it is a "Condition and not a theory that confronts us."

THE ENGLISH LANGUAGE ON AN INDIAN RESERVATION.

FRANCES C. SPARHAWK.

IT was tantalizing to hear them all around me talking and saying their bright things,—some of them I'm sure were bright—and hear the laughter that greeted these, and yet not understand a word. The Indians, at least on the reservations, do not joke in English, it stiffens their tongues too much; the utmost that they do is sometimes to translate a speech for the benefit of the stranger, and then the best of it inevitably escapes.

One evening I grew tired of not comprehending a word, and began as an experiment to talk French to them. They took the joke very well, and for a time tried the English, a courtesy which I appreciated. One very little fellow seated at table between his father and his mother was uniformly addressed in Indian by the former, while the latter often spoke to him in English. The child answered either parent with readiness, but chiefly spoke his own tongue. I appreciated the courtesy of this mother, for a time my hostess, in her valiant attempts to keep to my language. But one day she gave a sigh of exhaustion that upset my gravity completely, and declared that she could not stand it, she could not speak English all the time. And she immediately limbered her tongue on a little Indian. I laughed with her; but none the less did I perceive the seriousness of the point that she had made. For the language of jests and laughter and of sudden emotion is still the language of a people. It does not take that remark about making the songs of a nation to convince us of this. And before the Indians are really one with us in spirit, the English language must be to them as facile a tongue as their own.

Into this very reservation papers and magazines are now going to one and another among the Indians who enjoy reading and desire to keep up the English and improve it to keep pace a little with the young people, many their own children who have gone away to school and who on their return will bring with them much that is new and that they recognize as good. For on this reserva-

tion the element of the new has much more power than on many others, although here as everywhere else the old Indian spirit of opposition still lives and is as active as it is permitted to be. American ideas and American ways and enterprises are what these people need. No doubt, some of them are quite as good Christians as the greater part of the white people, and it might be safe to go even farther; but the best of Christians existed long before the days of American inventions, yet our Christian civilization requires, as addition, not as substitute, a knowledge of the affairs and the methods of to-day. The Indians on the reservations are either barbarous or primitive, as a whole. The exceptions must grow more and more frequent.

In the few weeks' stay that I made on this reservation, the possibilities were so good; what had been done already was so much that it needs only right methods to bring about results both speedy and excellent. They need Americanizing; the line between the reservation and the outside world is sharp and clear. In a few miles one passes through ages of time in ways of thinking and living even more than in appearance. The great sense of leisureliness is in the sharpest contrast with our haste, and that dread of the new in antithesis to our love for it. But one thing must always be remembered: to the Indians the new always comes in the shape of some move on the part of the whites, and to them this so often has proved a trap that it is no wonder they desire carefully to look it through, and then too often decide that their own way is the safe one. Some knowledge of our everyday life can reach them through our papers and magazines; and there are efforts to give them these liberally. To the progressive ones who take advantage of this opportunity, whether these are the returned students or the older Indians, this reading will be an added strength both for resistance of the old and for the advancement of the new, since it will fill them with the spirit of to-day; and to-day is born to conquer yesterday.

One day on this reservation at a "festival," which is not unlike our church sociable in some of its features, I was called upon for a speech. No Yankee can be fonder of speeches than the Indians are. I had listened, although I had not been able to join in the shouts of laughter which greeted some of the sallies; for the speeches had all been made in Indian. One of the speakers I had looked at with surprise when he first came into the room, I was

sure he was a white man and wondered how he came there. But no speaker among them all talked Indian more fluently than he. It seemed to me that they were losing their opportunities. When it came my turn I told my hearers that the American people were ready to remember the old understanding with which the Indians had first sold their lands to the white people, which had been not to give these up altogether, for they knew nothing of the exclusiveness of the white man, but to share them with their new neighbors. Now we were ready to keep the spirit of this agreement and share the whole country with them and make them citizens. But they could not enter into possession speaking a strange tongue. The secrets of our knowledge and our power were wrapped up in English language, and they could not gain their full rights until this was their language also. One of the returned students immediately rose and after a few words of English, proceeded to translate what I had said for the benefit of those who could not understand English. And yet, was it for this, or was it because to the Indians an interpreter is always an added dignity? For in connection with all this Indian speaking was one amusing fact, at the end of the festival this very returned student was asked to auction off the cake and pies and other things left upon the tables, the money thus received going into the general fund raised. Now, in doing this, every word he said was in English and all the bids were made in English; and there was not the least difficulty on either side in comprehending the other. I listened and laughed, and said to myself: "It is not because these people do not understand English well enough to learn more with ease, but because they do not care to talk it that they keep the Indian."

Again, when I was going to speak to the Indians at another festival, for they had finished their harvesting and were enjoying themselves, the sachem came up to me and inquired if I would have any objection to his interpreting for me as I went along? I confess that the request was somewhat appalling; how could I help feeling that my ideas would be somewhat chopped up together with my sentences? But, after all, it was a case of Hobson's choice, for how could I refuse a request so reasonable and so politely made? I looked at the sachem arrayed in full citizen dress with spotless linen and a good show of shirt front, and smiled my ready acquiescence. Then I began my talk to a set of people

most of whom in all probability understood English nearly as well as I did. For here were the members of the band, returned students largely, and many others who were constantly going into the neighboring town and meeting white men on their own ground, for the time being. But so strong in them was tribal affinity and so jealous were the older ones of innovations that the Indian dignity of an interpreter more than made up for the waste of time in repeating what was certainly not worth saying more than once. I had no means of knowing whether the sachem told the assembly exactly what I said; but I've no doubt that a good many there knew. But there is the rule that the children shall be taught English in the schools? All government teachers, Indian or otherwise, are required by law to do this. And when they talk English constantly in the schools, naturally, they also do it a great deal out of school.

The Indians are not the only people who go no farther on a difficult road than the law demands of them. One day I was talking, or rather trying to talk, with a pretty girl of fourteen who called herself Indian, although she had hazel eyes and a skin that would have allowed her to pass in any Eastern school as a white child. I say, trying to talk, because sometimes she could not answer me at all, and sometimes the replies went straying off in a way that showed my questions only half understood. I listened in some surprise; this seemed worse than I had expected. Perhaps it was only the young people who had been away to school and the older Indians who had gone off the reservation frequently whose English would bear examination. "Do you ever talk English anywhere except in school?" I asked her, at length. She told me that she never did. I readily believed her. Still, to speak a language six hours a day five days in the week must teach one a good deal of it. Alas! the children do not all go to school six hours in the day and five days in the week. This steadiness of attendance is reserved for the non-reservation schools, and the farther off from the reservations they are, the greater the regularity. And, then, strange as it may seem, the times in which they are required to speak English are not the times of their special loquacity.

My visit to the reservation was made to a returned student whom I had known at an Eastern school, a lady in character and manners and bearing. She had married one of the returned stu

dents, and at her home there was to be found more intimate acquaintance with the Indians of the reservation than would have come about in the home of the missionary. In addition to this consideration was that of a thorough liking for the young couple and a desire to see them in their own home. They showed no signs of relapsing, but the strongest desire to live like the white man. It was a little pathetic to hear her one morning speaking of her acres of valuable woodland from which she would have liked to sell timber to start her husband in business, as he wanted to let his farm land at a fair price to help him in this same project. But it was in vain for either to think of exercising the right of American citizens of full age, as they both were. As long as Indians have not the power to take their lands wherever in the country they please, or an equivalent, and to sell them as they judge best, they may be well treated wards, but they are never American citizens in the full sense. When her husband and I had gone on talking about it for a little while, he speaking earnestly of the life that he would like to live with the business opportunities that the white man has, the young wife looked up from a silence: "You see we might do this, if we could sell my timber land," she said suddenly: "but I shall be an old woman before it comes time for that." Then she looked down and silently went on with her breakfast.

It was a few days after this that we went together to the mission school; it happened to be on an afternoon when the girls had a lesson in fancy work and the boys a drill. The girls sat in the school room and with quiet satisfaction took the work handed to them; there was a marked absence of pushing or crowding to get ahead of each other, and I looked with interest at one pretty girl whose turn came last. Her eyes followed with eagerness the destination of one after another of the different articles given out; but not a motion or a look betrayed impatience at hope deferred, and when at last her sewing came to her she received it with the sweetest smile. The gymnastic drill was out of doors; and the little fellows did well under the circumstances. The first of these circumstances was that they did not understand English well enough to comprehend the orders readily; the second the teacher explained to me as he remarked, "I have almost a new squad every week; the children don't come to school regularly enough

to get into this thing. I wish we had a compulsory attendance law."

But some of these poor children cannot come in the winter, if they would; they have not warm enough clothing or covering for their feet to come out in the snow. The attendance of one government day school was largely increased one winter by the sending of a few barrels of clothing for distribution among the children. The poverty does not seem always the fault of the Indians, for when the men, possibly the fathers of these very children, cut their timber and haul it into town and sell it, as providently as if they were Yankees, the result is quite different. Instead of reaping the reward of their thrift, they are brought up before the courts and sometimes put into jail for months, because they have cut and sold their own timber. This is the beauty of reservation laws instead of American laws. Surely, the sooner the Indians can read and judge of our laws for themselves, and clamor for them, the sooner the Indian question will be settled.

But then these returned students who are so often the teachers will they not lead their pupils, their brothers, and sisters, and comrades, along the English road? This is one of their missions; does this count for nothing? From my first coming to the reservation, and, indeed, before this, I had wished to see Victoria, a returned Indian student. I had known her well and knew her to be full of energy, vivacity, and power, and also of the American spirit; she had a day school, and on her I depended to teach many things, and especially English in its spirit as well as its letter. On my first meeting with her I found her talking the fastest Indian I had yet heard! She drove me into the nearest town with her, and with a hospitality that I could not resist insisted upon treating me at the best restaurant that the place afforded. She, of course, conversed all the way in excellent English.

"Victoria," I said to her, "Why do you use Indian so, when you know the importance of the English, why don't you talk it to all the people that understand it?" The girl turned to me with a movement of perplexity, and in a word revealed the whole difficulty. If she should talk English chiefly, she confessed, people would be offended with her, they would hold it a line of separation, that she no longer considered herself Indian. Ah, here in this reservation which in so many ways was advanced, in so many

ways excellent, was the old spirit of conservatism, the old jealousy of anything not belonging from old times to the Indian; it would not have touched a white girl in her place, but it kept her back from what was best for herself and for them. She had much ability, and every advantage but the advantage in that place of being not an Indian; and this fact of her relationship to the people whom she was among cut her off from using familiarly the tongue which was to her, as to them, emancipation from the old order of things and inauguration into the new. It was also the tongue that must connect her with all that she could hope for in the future of learning, of progress in every way. She must from want of constant use necessarily forget something of her freedom in English; she was where if she tried to do her best, she would be considered by those whose judgment she must value as "set up." With much promise for her future if she could have a higher education, she must constantly do her second best to accommodate herself to her surroundings, surroundings which pressed upon her as they could never press upon a white girl doing her work.

And what was true of her was still more true of others less endowed by nature than herself. Under such circumstances why are the returned students in all cases the best teachers of their people? Why is it the wisest thing to cut off their future intellectual progress, as we should always bitterly regret doing that of all young people, without the compensation of their being of more value to the Indians as a means of progress than that of any other persons? And if the English language is resented, no doubt that other things are also. Why not at least first carry them on further in training before they undertake such a task and give them more power of resistance? Or, best of all, why not make them pioneers of their race into the broader fields of American life from which the most genuine of all Americans should be the last to be excluded?

THE INTRODUCTION OF PRINTING INTO ENGLAND BY WILLIAM CAXTON.

RUTH B. WHITTEMORE, DORCHESTER.

(*Concluded.*)

LET us notice briefly, some of the peculiarities of early printed works. In many ways the first books resembled the manuscripts of the time. Blades notes nine different customs of the scribes in the making of manuscript books, which were followed, or modified, by the early printers. (1.) The scribes were particular in selecting the vellum for their most costly books, and the printers carefully sorted their paper, that one book should be made entirely of the same quality of paper. (2.) If the scribes employed paper for books they alternated paper and parchment to give durability. Caxton did not continue this practice, but instead, pasted a strip of vellum down the centre of the section. (3.) The scribes began a book on the third page that the first leaf might serve as a covering. The early printers followed this practice. (4.) In manuscript books, but one page could be written at a time. The printers, it may be for various reasons, at first printed only page by page, and Caxton's early books were no exception to the rule. (5.) To assist the bookbinders in arranging the sequence of the sheets, the scribes placed "signatures" very near the bottom of the page, that they might be cut off in the binding. Some printers signed each page by hand, but afterwards the "signatures" were printed close up to the lowest line. This method was used by Caxton in 1480. (6.) It was the custom of the scribes to leave blank the upper part of the first written page for a vignette, and also to leave a space at the beginning of a chapter for an illuminated letter. The printers followed the practice, and to prevent the illuminator inserting a wrong letter, a small letter was printed in the space and covered afterwards by the large initial. (7.) The scribes rarely affixed to their manuscripts the name of the writer, or date of the transcription, and as the printers practised the same omission, it is very difficult to assign an exact date to many books which are known to have

come from the early presses. Out of nearly one hundred works from Caxton's press, about two-thirds have no date. (8.) The first printed characters were very similar to the written characters of the time. Caxton's types closely resemble the writing in the Mercers' books. (9.) It was impossible for the scribes to space their lines evenly, and the same unevenness is observed in the very early printed books. It was not long, however, before the printed page assumed a more regular appearance, which was due to a systematic spacing of the lines. Both Mansion and Caxton placed the spare space at the end of the line, but this practice was given up about 1480. Title-pages were invented by printers, and illuminated letters gave place to large printed letters engraved on wood.

But to return to Caxton. According to his epilogues and prologues, which surely ought to be good evidence, he learned "to ordain in printe" from Colard Mansion, and his first printed work was The Recuyell of the Histories of Troye, printed at Bruges, probably with Mansion's types and with his assistance. This was the first book printed in the English tongue. Five other books from the Bruges press have been attributed to Caxton, but only one besides "The Recuyell" can be traced directly to him. This was the Chess Book. Soon after the printing of the sixth book, whether by Mansion or Caxton, or both, Caxton, in or about the year 1476, with new type, probably furnished by Mansion, returned to his native country and set up his press in the Almonry, Westminster, London.

It is now generally conceded that the Westminster press was the first to be established in England. Although a book has been found from the Oxford press dated 1467, it is believed that there was a typographical error in the dating. There is no particular reason known why Caxton should have chosen the Almonry, Westminster Abbey, for the birthplace of English printing, but such was the case, and there, at the sign of the "Red pale," for fifteen years he worked at the new art and there, after his death, his immediate successor continued his work and inscribed his books, "Caxton's house at Westmynstre."

Caxton made use of eight different fonts or castings of letters. No. 1 was used only at Bruges and is not like any other known type. The body of No. 1 is the same as the Great Primer of modern printers. Type No. 2 came into use in 1477. This type differed

from No. 1 in being more elaborate. It was modified into No. 2* and afterwards into No. 6. No. 2* differed from No. 2 in that the letters were of a thinner character and less elaborate, although the body of the type is the same. No. 3 was used chiefly for headlines while printing with other type, although three books in Latin have been discovered printed wholly in this type. The small letters are like those of Fust and Schoeffer, but the large letters resemble those of Mansion. Type No. 4 was used in 1480 and was modified about 1483 into No. 4*. There is this difference between these types, that the body of No. 4 is somewhat smaller than No. 4*. No 4 was the smallest used by Caxton and is very much like the English of modern printers. No. 4* was succeeded by No. 5 which was very similar to No. 3. No. 6 came into use in 1483 and was the last type Caxton used. It resembled No. 2 somewhat, the body being almost identical with No. 1.

Of Caxton's method of casting type very little is known positively, but the type metal must necessarily have been soft enough to admit of cutting or trimming, as many of the types show evidence of such treatment. Caxton's marks of punctuation were limited to the comma, which was either a long or a short line, thus (|) (ı), the colon (:) and the full point (.). They were used with no degree of precision and very often were used in combination, or as Blades says, "Not seldom we see a dance of all the points used thus (.:. || ·:· |ı) to celebrate the conclusion of a book, or a chapter, the composer apparently regarding them as ornamental devices." Up to 1480 Caxton's pages wore the uneven appearance denoting the lack of uniformity in length of line, but in that year he adopted the setting rule and composing stick. Caxton's conservative nature is apparent from this fact; and another incident goes to illustrate it. We read, that regretting the decline of chivalry, he advised his sovereign to revive it even at the expense of a new crusade.

The first book printed in England issued from the Westminster press about 1477, was call the "Dictes and Sayings of the Philosophers. Unlike many early printers, Caxton did not fall into the mistake of printing books unsuited to the tastes of the people for whom he was printing. The English people at this time were not as desirous of the classics as for tales of chivalry, and so he printed romances and poetry for the people and service books for the clergy. Caxton was very particular in choosing books for his

press, translating many from different languages into his native "Englissh." Among his own translations are "The Life of Jason," "Mirror of the World," "Reynart the Fox," "Godfrey of Bulloyn," "Golden Legend," the book called "Caton," "Knight of the Tower," "Æsop's Fables," "Order of Chivalry," "Book of Good Manners," "Fayts of Arms," the "Art and Craft to Die Well" and the "Eneydos."

Of all the books from Caxton's press the "Golden Legend" seems to have been the largest and most elaborate. There were three editions, that of 1484, 1487 and 1493. At his death Caxton bequeathed several copies to the church; which were sold, bringing a price equal to six or seven pounds.†

We can hardly appreciate the extent of Caxton's labors, especially during the latter part of his life. In addition to his regular printing, his translations must have occupied much time and required much strength, and with this favorite occupation he was engaged till the hour of his death. He died in the latter part of 1491, bequeathing to his country and all English speaking nations, in his life and work, "a blessing greater than any other which had ever been bestowed, save only the introduction of

† A list of Caxton's most important works with the date of imprint as nearly as can be ascertained and the type in which each is printed, follows:

In type No. 1:—The Recuyell of the Histories of Troye, 1474 (?); LeRecueil des Histoires de Troyes, 1476 (?); The Game and Play of the Chess Moralised, 1476 (?); Les fais et prouesses du noble et vaillant Chevalier Jason, 147- (?); Meditacious sur les Sept Pseaulmes penitencialy, 1478 (?).

In type No. 2 and No. 2* there are twenty-nine books, of which the following are the most important.—Les Quatre Derrenieres Choses, 1475 (?); History of Jason, 1477 (?); The Dictes and Sayings, 1st edition, 1477; Horae, 1478 (?); Canterbury Tales, 1st edition, 1478 (?); Moral Proverbs, 1478; The Temple of Glass, ante 1479; The Temple of Brass, or the Parliment of Forok, ante 1479; The Book of Courtesy, ante 1479; The Dictes and Sayings, 2nd edition, 1480 (?); The Mirrour of the World, 1st edition, 1481 (?); Reynard the Fox, 1st edition, 1481. In the second edition of "The Dictes," the first edition of the "Mirrour of the World," in "Reynard," and the second edition of the "Game and Play of Chess," No. 2* was used, and in several No. 3 was used for headlines.

There are four books in type No. 3:—An Advertisement, 1477-78 (?); Directorium, 1st version, 1477-78 (?); Horae, 2nd edition, 1480 (?) Psalterium, etc., 1480-83 (?).

There are thirty-one books in types No. 4 and No. 4*, of which the following are important:—Chronicles, 1st edition, type 4, 1480; Description of Britain, type 4, 1480; Godfrey of Boloyne, type 4, 1481; Polychronicon, type 4, 1482; Pilgrimage of the Soul, type 4, 1483; Confessir Amantro, types 4 and 4*, 1484; The Knight of the Tower, types 4 and 4*, 1484; Æsop, type 4*, 1484; Canterbury Tales, 2nd edition, type 4*, 1484 (?); King Arthur, type 4*, 1485; Charles the Great, type 4*, 1485; Golden Legend, 2nd edition, type 4*, 1487.

There are eleven books in type No. 5, the most important are:—The Book of Good Manners, 1487; Speculum, 1st edition, 1487 (?); Horae, 3rd edition, 1488(?); Doctrinal, 1489; Commemoratio, 1491 (?).

There are nineteen books printed in type No. 6. The following are important:—Fayts of Arms, 1489 (?); Reynard, 2nd edition, 1489 (?); Eneydos, 1490 (?); Dictes and Sayings, 3rd edition, 1490 (?); Mirrour of the World, 2nd edition, 1490 (?); Divers Ghostly Matters, 1491 (?); Art and Craft to know well to Die, 1491 (?); Four Sermons, 2nd edition, 1491 (?); The Book of Courtesy, 2nd edition, 1491 (?); Treatise of Love, 1491 (?).

Christianity." Winken de Worde, one of Caxton's workmen, succeeded him, and became celebrated for his excellent work.

During Caxton's life, Letton and Machlinia, foreign printers, were at work in London, and in 1486 a press was established at St. Albans. The Oxford press was probably founded in 1478, and one in Cambridge not much later. Thus the art spread slowly over England, but, in spite of its wonderful benefits, in the sixteenth century it was put under restrictions by the government which necessarily retarded its progress. In William and Mary's time, however, the press regained its freedom, and from that time onward it advanced with rapidity.

And, now, as to its effects on English literature and life. The magnitude of the effects following the introduction of this art is such that I am constrained to ask: What, in English life and literature, has not been effected by the invention of printing and its introduction into England?

Let us consider some of the most important benefits that have flowed through the channel opened by Caxton. Richard Porson said he would give more for a single copy of a daily newspaper published in ancient Anthens, to learn Athenian life and character, than for all that has come down to us. With these facts in mind let us in imagination take our stand for a moment beside one of Hoe's presses in the office of the "World," the "Tribune," or the "Herald," and see eight hundred impressions, of sixteen or twenty-four pages each, thrown off every minute — forty-eight thousand an hour — and then reflect that the whole history of our civilized humanity for twenty-four hours, has been condensed in those sheets. The markets, the crops, the weather, the exchanges, the wars, the incidents, the accidents, the crimes committed, the virtues exhibited, the base-ball, the foot-ball, the politics, and all the fond nothings of our daily lives — all this in two or three hours will be left at the fireside, at the counting-room, in the workshop, in the library, in the hospital; wherever humanity is thinking, feeling, acting, or suffering. Reflect that before the sun reaches the meridian millions of human beings will be at work on new lines of thought and action, bargains will be made, plans formed, modified, or abandoned; all this the fruit of the work of the magical enginery of Caxton. Do I claim too much? Take Hoe's press in hand and follow up its genealogy; trace effect back to cause through four centuries and you will historically, logically

and inevitably find yourself in the almonry of Westminster Abbey. There, amid those chambers, where England has treasured her mightiest dead, there will dawn a light and be felt a force which will control the destinies of the English language, and through the language the nation, and through the nation the world.

Take the dictionary—the "Century Dictionary" for example; or the vastly larger one in progress in England. This work would have been impossible before Caxton lived. Or, grant if you claim it that the dictionary could be made and that a copy could be placed at the city hall for the public use. Would it be of the least practical benefit? But, with Caxton's aid, we have it in our school-rooms and in our homes. Daniel Webster gained renown by his fine figure descriptive of the military power of England; "A power which has dotted over the surface of the whole globe with her possessions and military posts, whose morning drum-beat following the sun and keeping company with the hours circles the earth with one continuous and unbroken strain of the martial airs of England."

As I stand beside my Hoe press and listen to the music of our Anglo-Saxon speech through its cylinders,—

> "Our stern old Saxon whose Teutonic jar
> Shakes the racked axle of Time's rushing car,"

with the breathing thoughts and burning words that fly from its Caxton types, catch all the strains, grave and gay, lively and severe, which make up its grand symphony, and think that the sun in all his course can see no land through which this stream does not flow, I burst involuntarily into borrowed song. Hear it—

> "Sound in Borneo's camphor groves, on seas of fierce Malay,
> In fields that curb old Ganges' flood and towers of proud Bombay.
> It wakes up Aden's flashing eyes, dusk brows and swarthy limbs;
> The dark Liberian soothes her child with English cradle hymns.
>
> Tasmania's maids are wooed and won in gentle Saxon speech;
> Australian boys read Crusoe's life by Sydney's sheltered beach:
> It dwells where Afric's southmost capes meet oceans broad and blue,
> And Nieuveld's rugged mountains gird the wide and waste karroo.
>
> It kindles realms so far apart that, while its praise you sing,
> *These* may be clad with autumn's fruits and *those* with flowers of spring;

It quickens lands whose meteor lights flame in our Arctic sky,
And lands for which the Southern Cross hangs its orbed fires on high.

It goes with all that prophets told, and righteous kings desired, —
With all that great apostles taught, and glorious Greeks admired, —
With Shakespeare's deep and wondrous verse, and Milton's loftier mind, —
With Alfred's laws, and Newton's lore,—to cheer and bless mankind."

When I see and hear all this and see it marked by greater happiness and higher civilization, I prefer the music of the printing press to that of the drum-beat and the martial airs of England; the march of her Caxton to the march of her Clive.

PRESENT EDUCATIONAL ASPECTS OF TYPE-WRITING.

FRANK H. PALMER.

GEORGE ELIOT has said that of all forms of mistake prophecy is the most gratuitous. Nevertheless, we venture the prophecy that in five years more the use of the typewriter will be almost universal.

The age is one which readily recognizes a good thing when it sees it. The merits of typewriting are coming to be generally recognized. The machine itself has had a marvelously rapid development. If we turn back only ten years and read the descriptions of typewriting and typewriters in the then current periodicals it is like making a visit to the Smithsonian Institute to examine the first locomotive engine ever used in America. Although the first American patent on a writing machine dates back to 1829, when William Austin Burt, of Detroit, brought out an exceedingly crude and roughly constructed model, the first really practical machine did not make its appearance upon the market until 1874. This was the result of many efforts and experiments culminating in the successful introduction of the manufacture of typewriters into the extensive gun factories (at Ilion, N. Y.) of the Messrs. E. Remington & Sons, a name which has since become familiar in this connection throughout the entire civilized world.

The detailed history of this wonderful modern invention through its earlier successive stages has been interestingly given to the public elsewhere.[1] We wish simply to note here a few of its relations to the great subject of education. That it has such relations cannot for a moment be doubted by anyone who at all appreciates the spirit and trend of the intellectual and commercial life of the times.

The typewriter has become a necessity of modern civilization. The age is one of intense concentration and specialization. It is tremendously exacting. Everything must be done in the quickest time and in the best way. Uncivilized nations, barbarous ages are content with a rough way of doing things. With the advance of culture and the growth of competition whoever would survive and rise to the top in the struggle for success must avail himself of every possible advantage. Again, in the great conquest of nature for the spiritual uses of man, progress comes by specialization. A lifetime is spent in the perfection of a single little wheel, or valve or piston. The complicated mechanism of a perfected machine, the steam engine, for example, represents the painstaking exactitude of many minds, and illustrates in its invention and perfection a great general mental trait or age-characteristic. It is a time of close thinking and precise execution. All educational processes must converge to the point of the production of this essential quality of a highly trained mind.

The typewriter is at once a product of this modern mental trait, and an efficient cause or means of its further development. It is a great help toward accuracy, despatch and concentration. As this is perceived by the public there will be a stronger and more insistent demand that it be made generally available to the coming generations.

Then, as an ever increasing host of young men and women receive daily training in its practical manipulation, there will be produced what may be called the typewriting "habit," which will almost indefinitely increase the scope and possibilities of the art. As the breeding and speeding of horses has gradually "lowered the record," and also made its influence felt in increasing the speed and endurance of horses in general throughout the country, so the cultivation of the typewriting habit seems likely

[1] See, for example, the article by Herbert Overleigh, on "The Evolution of the Typewriter," in Belford's Monthly for April, 1892.

to make a very rapid rate of thought and its expression possible as a common attainment in the not distant future. A few years ago, a horse that could trot a mile in two minutes and forty seconds was a marvel. Now, there are hundreds of horses in all parts of the country that can do better than that, and the record has been lowered to 2:08.

Ten years ago, Mr. J. G. Petrie, in an interesting paper on "Reporting and Transcribing Machines" (published by James Wade, London), said that the maximum rate of writing was from thirty to forty words per minute; but he adds that few writers can keep up that rate of writing for many minutes, and that the writing will be far from legible.

Now, 160 to 170 words per minute are frequently written with legibility and beauty of alignment by the best operators, and a speed of forty to sixty words is easily attained by almost anyone after a few weeks' practice.[2] As this article is being written there comes the authoritative announcement of the beating of the world's record by Mr. Charles H. McGurrin, of Kalamazoo, Mich., official reporter of the Ninth Judicial district of Michigan, who, on the nineteenth of May, wrote two hundred words in one minute, on a Remington typewriter.[3] The Caligraph, International, Bar-Lock, Smith Premier and other machines also show high rates of speed.

Quick execution, clear, clean-cut accuracy of expression, — these are what the age as a whole, and business men in particular, want and are requiring. The schools must help to secure these results. They *are* helping. The past six months have witnessed a decided advance, both in the actual introduction of machines into the school-room and in the appreciation of their relations to education by leading educators. There are so many advantages that this "innovation" was from the first as bound to come as was the steam engine after James Watt watched the tea kettle in his mother's kitchen.

[2] As long ago as September, 1890, a test was made at the Pittsburg College of Shorthand, a large number of persons being present, including many teachers from the typewriter schools. At this test examination a Mr. Manning made seventeen letters upon a Hammond machine in *one second*. The Pittsburg *Despatch* next morning said: "It is almost impossible to believe that 181 words a minute can be written on a typewriter; yet such is a fact, and this phenomenal rate of speed was attained upon a Hammond machine in this city last evening. * * The copy was turned out in clear and perfect print, with but few errors."

[3] The American Newspaper Publishers' Association, which embraces nearly fifteen hundred of the leading papers of the country, including all but one of the great New York dailies, after an exhaustive examination of the comparative merits of the various typewriters for the use of its members, has just decided in favor of the Remington.

These are some of the considerations that lead us to prophesy the general introduction and use of typewriters in our schools in a comparatively few more years. The need, the advantages and the possibilities of this new art are every day becoming more and more clear.

We have been able to secure from several leading educators, who have had actual experience in the use of the typewriter in the schools, some very interesting testimony in regard to the experiment, if it can any longer be called by such a name. With remarkable unanimity they bear witness to the advantages growing out of its use in connection with education, especially as a purely educational instrument, apart from its industrial value.

We may briefly summarize these advantages somewhat as follows: —

1. Rapidity of thought, composition and execution.
2. Accuracy, including careful attention to spelling, punctuation, capitalization, paragraphing, and all rhetorical principles.
3. Neatness.
4. Clearness of thought.
5. Mastery of language, the acquirement of a clear, vigorous English style, including a knowledge of the real meaning of words and skill in using them.
6. A great saving of time and strength to the teacher resulting from the superior legibility of examination papers, etc. This means more and better teaching in schools where typewriters are introduced.

These points are forcibly brought out in detail in the following sample quotations, which speak for themselves: —

Mr. Walter E. Ranger, Principal of Lyndon Institute, Lyndon Center, Vt., writes: "Believing in the utility of the typewriter in public and private schools, and foreseeing that its use therein would sooner or later become general, three years ago we introduced typewriting in our institution. The result has been eminently satisfactory, and we are confirmed in the belief that typewriting will soon have a place in all well equipped high schools and academies. Our teacher of English says that those students who work with the typewriter make markedly more progress in the art of composition than those who do not."

Principal Albert Somes, of Manchester, N. H., writes: — "I do not think any of the teachers use the typewriter at all, except

myself. The scholars use it whenever they wish during school hours. At the beginning of each week I put up in the study-room five slips, one for each day of the week, and each slip is divided into parts as follows; —

TUESDAY, SIXTH WEEK.

I. hour.
II. "
III. "
IV. "
V. "

Any scholar may write his name in any blank space on a slip not more than twice each week, and by so doing he secures the use of the typewriter for the hour of the day indicated on the slip. He may use it as he pleases. We have no teacher to give instruction, and the only care I can take of it is to see that it is not injured, and is kept reasonably clean. The scholar who can use it will teach one who cannot, and with a little instruction one can do very well. Sometimes scholars write compositions with it, and I have found them writing out translations and other school exercises. I wish we might have more typewriters, and a room fitted up especially for them and a teacher to give the needed instruction and see that the scholars use the instruments properly. I think compositions could be written with them generally, and they would be of much advantage in teaching spelling, use of punctuation marks and arrangement of sentences. I believe everyone of our graduates who wished could become a skillful operator. Now, although our typewriter has been in use almost every hour since it was brought into the building, it is not possible for a scholar to obtain the use of it often enough to keep in practice."

Principal E. A. Bishop, of Montpelier, Vt., says: "After using the Remington typewriters in the Vermont Methodist Seminary for more than a year, I am glad to bear testimony to the excellent results attained. Our instruments are kept in the academic building, and pupils who desire are assigned hours for practice. Quite a number have availed themselves of the opportunity. I have noticed, first, a care for correct spelling and punctuation which we had not been able to secure otherwise. With a typewriter, a student cannot make a scrawl or a dash and call it any-

thing or nothing. In the next place, I have seen an unusual attention to the structure of sentences. The rhetoric of a composition seems to stand out more clearly before the pupil on a printed than on a written page; and as the manipulation of the machine soon becomes mechanical, the writer devotes much attention, even in copying articles, to the structure and finish of the sentences. I fully believe that the typewriter put in the hands of all our pupils would prove a valuable aid to their education."

A well-known New England Superintendent of Schools writes: "I recently bought a typewriter for my children. Their ages are eight, eleven, thirteen and seventeen respectively. By taking turns for practice, they keep the machine pretty constantly in motion. They are delighted with it, and are rapidly learning its proper use. I did not buy the typewriter in the expectation that they are to gain a livelihood as operators, though that may be easily possible, if necessary. I bought it rather as an educational means whereby they may pleasantly and most efficiently learn a proper use of the English language, — terseness and elegance of expression, spelling, capitalization, punctuation, paragraphing, business and other forms, etc., etc. I also have in mind that in their day and generation the typewriter will be the common means, as now the pen, for correspondence and general writing in every vocation. An acquaintance with the machine early in life is not only most easily acquired, but its subsequent use will be agreeable, natural, and of inestimable value. Besides, in my own case, I shall soon reap the advantages of having several first-class amanuenses in my own family to whom I can dictate matter directly without the use of shorthand, as I now frequently do to the clerk in my office."

This last quotation suggests a very important subject, — viz., the introduction of the typewriter into the family as an educational instrument. Even the smaller, cheaper machines are very useful in a family of children, proving, as experience has taught the writer, most fascinating playthings, and at the same time being far more than that, most helpful in the formation of correct mental habits and in teaching the same carefulness and accuracy of execution as the more costly ones. The larger typewriter companies say that the manufacture of the smaller, low-cost machines (as the "Improved Hall," the "Sun," etc., upon which a child may learn to write in a few minutes' practice) has helped, rather

than hurt their business. Many persons, both young and old, begin with a cheap instrument, and by it create the need and acquire an appreciation of a more costly one.[4]

Some idea of the marvellous growth of typewriting and the present extent of the business of making and selling the instruments may be gained from the following facts and figures: In 1882 the annual production at the Remington factory did not exceed fifteen hundred. At present this single factory is making over one hundred machines each day, and the company's plant is so arranged that a production of a thousand a week can easily be reached. The force of men employed has been constantly increased until it is now about seven hundred at the factory, to say nothing of the large number of persons all over the world engaged in selling the machines. Over two hundred thousand typewriting machines of all makes have been put upon the market in the past ten years. A great army of men and women are operating them all over the country, thereby gaining their livelihood. A new industry has been created into which thousands of young people of both sexes, especially young women, are entering. Typewriters have been introduced into over two hundred schools in New England alone, mostly within the past year. The United States Government employs nearly or quite twenty-five hundred typewriters in its various departments. With one of these machines a business man can dictate with ease, and his clerk can neatly print, sixty business letters in a day. It has been demonstrated by many tests, that the typewriter as compared with the pen, saves forty minutes an hour, or five hours and twenty minutes in a business day. If "time is money" it is easy to calculate what kind of a bargain one makes in purchasing one of these labor-saving machines. The average salary paid to operators in New England is: men, $13.63: women, $11.04.

Thus the typewriter must be counted in among the great discoveries and priceless benefactions of the age. With it man is vastly extending his influence in many directions.

There are still to be found, even within a radius of fifty miles from some of our large cities, a few conservative and venerable

[4] Each of the leading typewriters now on the market claims some special points of excellence over other machines; but the buyer would do well to spend a considerable time, before purchasing, in carefully examining the different makes, and especially in counselling with some of the vast number of typewriter users, whose experience would render their advice valuable.

rustics who have never ridden upon the steam-cars, received a telegraphic message, nor talked through the telephone. The age is rushing along ahead of them. They are slowly plodding on "behind the times." Thirty years from now the person who does not use a typewriter for his business, his correspondence and all his literary activities will have to train in the same company. It will then be as impossible to comprehend how men got along without the typewriter as we now find it to understand how a by-gone age could get anywhere by stage coach. The pen *was* "mightier than the sword." The typewriter *is* mightier than the pen. The latter is wearing out. It will soon sink into "innocuous desuetude" save as here and there a graybeard clings to his rusty weapon. In the museums of the future the pen will be hung up with the warming-pan, the flint-lock and the spinning-wheel.

EDITORIAL.

HON. JOHN W. DICKINSON, Secretary of the Massachusetts State Board of Education, will have a valuable article in the September number of EDUCATION on the "Province of the Normal School."

WILL you be at Narragansett Pier on July 5–8? The American Institute of Instruction deserves generous support. Of course you will be at Saratoga, a week later. Such a vast and thirsty crowd as will there assemble on July 12, will doubtless have an appreciable effect upon the springs of water as well as of life and learning.

HORACE MANN was the greatest educator of this century in America. His Works ought to be in all teachers' libraries. No one can read them without catching something of the spirit which actuated, yea, dominated him. A more single-eyed, high-principled, self-sacrificing man it would be hard to find. He magnified his calling. His depth of knowledge, breadth of view and thorough understanding of all educational subjects make these volumes a *thesaurus* from which every earnest educator of our time may draw continued inspiration. In order to make it easier for our readers to secure these books, we have made special arrangements with the publishers, the benefit of which we offer to our readers. For particulars turn to the Bulletin Board.

QUITE in keeping with the spirit of the age is the movement which has been inaugurated in several of our large cities to thoroughly study the principles of *cookery* and reduce the art to a science. What is there which bears a more vital relation to human affairs? Who can become a good student, an able statesman or a successful business man on a diet of sour bread and unintelligently cooked meats? The road to eminence in all callings leads directly through the kitchen. The cook is equally responsible with the parson even for the moral well-being of the race. Dyspepsia is the direct cause of a vast amount of the sins of men. With the growth of our knowledge of Christianity, and with the extension of the modern scientific spirit we have begun to recognize the fact that the relations of food-materials to the body, their combinations and proportions, with the effects produced upon them by the subtle agent of heat, constitute almost an "exact science." Instead of throwing together "a few" bones and vegetables, putting in "a pinch" of salt and boiling the mixture "a while," we now combine an exact weight of animal substance with a certain proportion of vegetable, season with a given quantity of salt or pepper, as the case may be, and cook in a specified way, getting a result precisely suited to a given end in the nourishment, upbuilding or recuperation of the physical life. This subject has a clear relation to education, to medical practice, to hospitals and the care of the sick, and to the home life.

FOR the past year there has been a prodigious "Thundering in the index" concerning a grand movement for the reconstruction of the American Common School System by an influential portion of the Catholic hierarchy in the United States. Archbishop Ireland of Minnesota has appeared as the champion of this method of adjusting the public schools of that state to the demands of the Catholic priesthood. The experiment has been on trial in more than one community. A due amount of opposition has been manifested, with headquarters in New York City, whereby Archbishop Ireland has been presented to the educational public of the country as the leader of a great reform movement, but beset by the reactionary forces of his own church. A few weeks since, the good Archbishop hurried to Rome, and it was announced that the power in the Vatican was brooding over the "impending crisis" in American educational affairs precipitated in the northwest. Now his Holiness, the Pope, has given "toleration" to the "new departure," and the plan ushered in with a flourish of Metropolitan journalistic endorsement is to be pushed as the latest device for the reconciliation of the chronic difference between the contending systems of popular education. Till a recent period there has been a cer-

tain mystery attending the inception and progress of the movement and nobody seems to have quite "sensed" the "true inwardness" of the Faribault experiment. But at last, the fulness of the grand scheme is revealed. Recently an ecclesiastic from the very place where the arrangement was concocted has given an elaborate and what appears to be an accurate description of the scheme for the readjustment of the American Common School, as far as concerns the 1,500,000 children and youth of Catholic parents in the country, 725,000 of whom are already gathered into the parochial schools of that church.

IT turns out that the new scheme is essentially the arrangement that has been in operation in the city of Poughkeepsie, N. Y., for several years; similar to the arrangement in several of the large cities in Georgia and forced by the Catholic priesthood upon the territory of New Mexico. The parochial school buildings are leased or turned over to the public school board, and the schools gathered therein are included in the common school system of the place. The teachers are retained; as the school board, by unwritten agreement, would appoint only those agreeable to the ruling ecclesiastic of the church. This secured, the school in other respects goes on like all others, during certain hours of the day. We believe Superintendent Draper of New York ruled that the teachers in such schools should not wear the uniform of their respective religious orders or be recorded in the catalogue by their church names; and in Minnesota the religious pictures and emblems have been removed from the buildings. But, outside school hours, before or after the regular session, the same religious exercises and courses of instruction as in the parochial schools are introduced. This arrangement, although "not ideal" is said to be perfectly agreeable to the local Catholic clergy, and not objectionable to the school boards of these committees; indeed it is defended by their superintendents and school authorities as a happy device for getting over the difficulty precipitated by the Catholic theory of religious education.

WHY Archbishop Corrigan should object to this plan is not evident. And why an American community should consent to it in any other way than the temporary assent of the reigning political party to the domination of a politico-religious ring is not apparent. For the scheme in at least four essential ways is in conflict with the radical idea and intent of the American Common School! First, it separates the school children on lines of sectarian religious difference, gathering in certain school houses only pupils of one religious faith. It amounts to nothing to say, that these schools are open to all children. In the same way every Catholic church and Sunday school, is

open to any child. But, because it is a collection of Catholic children, purposely made, no other sort will apply. Second, it introduces a sectarian, religious test in the election of teachers. None but Catholic children would be placed in such a school. The object of the arrangement is that the children of one sect shall be separated from those of all others and be instructed only by teachers of their own faith. Third, it changes, practically, a common schoolhouse into an annex to a Catholic church. The radical condition of the arrangement is that the children shall be instructed in the creed and polity of one religious body in a public schoolhouse, as a regular exercise of everyday's attendance, under the direction of the priest. Fourth, but the most objectionable feature of the scheme is the virtual abdication of the authority of the state in behalf of the church. The working success of the whole plan depends on an unwritten understanding between the authorities and the priesthood, which could not be written out without absolute defiance of the Constitution of the United States and every state.

The chief corner stone of the American system of government is the absolute separation of church and state. The common school is a part of the government, its most vital centre. To separate American children therein on sectarian religious lines, to appoint teachers for the same reason, to use public schoolhouses for the sectarian instruction of the whole body of pupils, especially to take into consideration a clergyman, or priest, as the unrecognized head of a scheme superficially conformed to the school laws, is the very sum and substance of violation of the American idea. To say that such things are now done without authority is only to declare that a school board or a community evades the law. To parade such a plan as a legal compromise is an insult to the intelligence of the American people.

THE test of the scheme is its honest application to all sects and parties gathered about the observance of religion in an American community. What would happen were all churches, Christian, Hebrew, Mormon, and Pagan, all associations, spiritualistic, Christian-Science, Agnostic, Atheistic, What-not, to claim the benefit of this arrangement? It is no answer that these different churches and associations do not make this demand. That is because the majority of their members believe in the American idea of the separation of church and state and the minority, who believe otherwise, support private and denominational schools at their own expense. Only the Catholic and possibly, one or two other bodies of the priesthood representing churches composed largely of European immigrants have enlisted in this crusade to change the American to the Canadian and

European system of common schools. In Georgia the practice has been tolerated by a loose construction of the law which seems to authorize the subsidizing of private and church schools by public money; a practice which has wrought wide-spread mischief through the rural districts and done much to keep this great and prosperous commonwealth the least progressive American state in popular education. It is not strange that a section of the metropolitan press should hail this as a grand new departure, or that the party in every community opposed to the common school on religious grounds should take heart and strike hands with the Bishops. But the American people a generation ago argued this thing out, and, state by state, and, if it comes to that, by national constitutional provision, will see that in this its most vital principle, "the Republic receives no harm."

THE attention of our readers is invited to the "Department of Professional Study," an announcement of which follows. This department will appear regularly in EDUCATION beginning with our next (September) number, and will be under the skillful editorial charge of Dr. Chas. J. Majory. A rare opportunity for teachers of all grades is here presented. The Teachers' International Reading Circle opens lines of professional reading and home study, prepared under the wise supervision of Dr. Wm. T. Harris, which will strengthen the mind and broaden the outlook of every progressive teacher. By special arrangement EDUCATION becomes the official organ of the Teachers' International Reading Circle. The department devoted to this subject will hereafter contain Dr. Majory's monthly Syllabi. It will, therefore, be best for all correspondence members to take EDUCATION. To make it possible for every teacher in the land to do this the price of the magazine is put down to all such members to *two dollars* each per year. And a subscription to EDUCATION, paid *in advance*, entitles the subscriber to every privilege of a correspondence member without further charge. As the *fee* for each correspondence member is *two dollars* a year, we are really offering EDUCATION *free* to every teacher who wishes to join this great reading circle. Our present subscribers may avail themselves of the privileges herein offered by paying their subscriptions to the first of September, 1893. We suggest that every subscriber desiring to avail himself or herself of this great offer and reduced rate, send us one or more new subscriptions with his or her own. No reductions can be made to clubs, or agents, on the subscriptions of correspondence members.

DEPARTMENT OF PROFESSIONAL STUDY.

DR. CHAS. J. MAJORY, EDITOR.

Secretary of the Teachers' International Reading Circle.

AN OUTLINE FOR PRACTICAL WORK.

A FEW months ago, Dr. Wm. T. Harris, U. S. Commissioner of Education, in view of the growing interest among teachers in professional reading and study, and in response to a demand for some systematic and comprehensive outline as a basis for such work, prepared what is entitled, "Teachers' Course of Professional Reading for Home Work and Reading Circles." It is based upon the International Education series, comprising many of the most valuable works in standard and modern educational literature, and covering the whole field of pedagogical study.

The several volumes of the series Dr. Harris classifies under four heads:—I. History of Education. II. Criticism of Existing Methods. III. Theory of Education. IV. Practice. The following is the schedule for the

FIRST YEAR.

I. HISTORY OF EDUCATION.
   1. Painter's History of Education (Vol. II. of the Series).
   2. Rosenkranz: Philosophy of Education (Vol. I), Part III., pages 196–284: for reference, to explain national ideas.

II. CRITICISM OF EXISTING METHODS.
   Quick's Educational Reformers (Vol. XVII). The first sixteen chapters, up to and including Pestalozzi.

III. THEORY OF EDUCATION.
   1. Rosenkranz: Philosophy of Education (Part I). On the the nature, form, and limits of education, pages 1–51.
   2. Baldwin's Elementary Psychology and Education (Vol. VI).

IV. PRACTICE.
   1. Howland's Practical Hints for Teachers of Public Schools (Vol. XIII).
   2. Klemm's European Schools (Vol. XII).
   3. Parker's How to Study Geography (Vol. X).

The publishers of the International series, Messrs. D. Appleton & Co., New York, will be glad to send to any interested teacher the complete outline of this course of study.

The purpose of the outline is to aid in arranging a systematic and logical course of reading to include topical studies under the four heads mentioned, covering a period of three years, the whole forming a sort of spiral ascent in professional knowledge and training.

The books selected for the first year's reading under this outline are the following: —

	History.	Criticism.	Theory.	Practice.
Brief Course,	Painter.		Baldwin.	Howland.
Advanced Course,		Quick.		Klemm.
Complete Course,	Rosenkranz.			Parker.

In order that the series may be used to greatest advantage by teachers who may be so situated that the complete course could not be well undertaken, and that all may have more detailed assistance and guidance in their study, there has been organized the Teachers' International Reading Circle with due provision for correspondence work. The plan of this organization adopts the period of three years as the working basis of time, but the full course of reading has been subdivided so as to provide for a Brief Course of three books per year, and an Advanced Course of five books, as well as for the Complete Course of seven books per year. Principals or superintendents of schools with a considerable store of matured ideas, gathered from experience and from former study, may be able to pursue the complete course. Even those of less experience, who have well-trained minds and the ability to devote an average of a full hour per day to systematic study, may complete the work in the prescribed time. But for many teachers it may be better to take the brief course or advanced course of reading outlined in the syllabi prepared for correspondence members. The books suggested for the first year's reading in such courses are the following: —

In this arrangement the Advanced Course adds to the work of the Brief Course the next two books, and the Complete Course adds the other two.

Upon these books there is in preparation for the use of members a series of monthly syllabi in which topics and questions are presented to the reader, designed to suggest the most definite and systematic method of study. The correspondence work of the members consists in preparing written work to be forwarded to the secretary of the Circle. The best understanding of the nature of this work may be had from the following presentation of pages from the first monthly syllabus relating to the three books of the brief course of reading.

I. Painter's History of Education. Pages 1 to 76.

THE ORIENTAL AND CLASSICAL NATIONS.

1. Upon what ground are the several designations, *traditional*, *caste*, etc., given to the systems of education in the countries named?
2. Determine what elements from each system you would deem most valuable in our modern systems.
3. What influences of each of the ancient systems should be avoided?
4. What were the characteristics of the "Socratic Method" of teaching?
5. What use may be profitably made of such method in our schools?

II. Baldwin's Elementary Psychology. Pages 1 to 44.

ATTENTION.

1. Formulate the definition that is clearest to your mind, and state why you prefer that to others.
2. Of the two kinds, Objective and Subjective Attention, which is it most important to cultivate in the periods of school life?
3. How is the power of Voluntary Attention to be educated?

INSTINCT.

Characteristics.

Classes.

Relation to Intellect.

The author's very suggestive study-hints should be made use of for carefully thought-out written work.

IMPORTANT TERMS.

The terms presented need to become part of your vocabulary to such extent that each may readily and definitely bring into your thought, at any recurrence, its appropriate idea.

If this is your first study of the subject of Psychology, you will need to go over this section many times.

III. Howland's Practical Hints for Teachers. Pages 1 to 35.

MORAL TRAINING.

A. Value of the public criticism of our schools.

B. Your judgment of the moral influences most active in our schools.

C. What good influences the schools should actively exert.

D. What habits constitute moral excellence.

E. Efficient means of moral culture.

THE CHARACTER OF THE TEACHER.

A. The teacher as portrayed in literature.

B. Effects of life with children.

C. Need for broad scholarship and for professional training.

D. Distinction between true and false dignity.

For general convenience in relation to the school year, the reading of the course is divided into portions for eight months. Upon the satisfactory completion of written work upon the reading prescribed for a year, in either the brief course, the advanced or the complete course, there will be issued a certificate for that year. Upon the completion of three years' work a final certificate or diploma will be issued. The provisions made for the earning of the Circle certificates are such that they will command the respect of those familiar with the aims and working methods of the International Circle. The preparation of this written work is deemed of more value for reading circle purposes than any formal examination at the close of a year, and no such examination will be held.

As a further step in this work of providing for teachers the best available means of professional advancement by the reading of educational literature, the International Reading Circle have arranged to make EDUCATION the official organ of the Circle, and to publish the monthly syllabi in the regular issues of this journal, beginning with September next. This arrangement enables every subscriber to EDUCATION, one of the most valuable educational magazines published, to obtain these important aids to professional reading without cost. In addition to this the publishers of EDUCATION offer this magazine to all members of the Teachers' International Reading Circle at two dollars a year, one-third less than the regular price. All teachers are invited to register as members of the International Reading Circle. For registration blanks, address the secretary of the Circle, Dr. Chas. J. Majory, East Orange, N. J. Certificates of membership and Dr. Harris's Course of Professional Reading for Home Study will be sent without charge to all who forward the regular application form. Such members will be classed only as reading members. But the systematic study by topic and question is deemed of such high value that all are urged to accompany their application with the two ($2.00) dollar fee, which will entitle them both to the advantages of correspondence members and to the magazine EDUCATION for one year.

The systematic study by topic, question, and written work is to be done under the direction of the secretary, who will give further particulars on application.

D. LOTHROP.

D. Lothrop is a name familiar to all English speaking people. And well it may be for the great publishing house which Daniel Lothrop founded and of which he was for so many years the active head, has in these last years been sending forth 1,500,000 books a year. Mr. Lothrop entered the publishing business not merely to make money, but dominating the lower motive was always a noble purpose to do good. He was born at Rochester, N. H., on Aug. 11th, 1831, and so was in his sixty-first year at the time of his death; Mar. 18, 1892. Life with him, in his early years especially, was a battle. But the bright, cheery, sturdy lad was not discouraged when he had to leave school and enter on a business career. And the man who knew what ill health and business losses by fires, panics and others' failures meant, never flinched but went steadily forward in his honorable career. He has given us the best of Sunday school books and multitudes of other excellent ones. He has given us *Wide Awake* and the children's magazines; all of them pure, bright, entertaining, instructive. Mr. Lothrop is dead, but the beneficent influences he set in motion live, and will long live to bless mankind. These are his monuments, more enduring than brass, whose full fruition in ennobled lives only eternity can disclose.

ED. EDUCATION.

FOREIGN NOTES.

FRANCE.

Elementary Education. — The French educational system judged by the summarized statistics, has successfully accomplished one of the great ends for which a system exists, namely, that of bringing all the youth of a nation under instruction. According to the census of 1886, there were in France 4,729,511 children of school age, i. e., six to thirteen (the latter inclusive). The annual increase in this population from 1881 to 1886 was at the rate of 6-10 per cent. If this rate continued the population of the ages specified would have reached a total of 4,786,265 in 1888. According to the official report for 1888–1889 the number of children of these ages inscribed upon the registers of primary schools, including the infant grade, was 4,691,218, or 98 per cent. of the total population of the school age. Judging from the statistics reported for 1887, the children under fourteen years of age in secondary schools and receiving instruction at home would very nearly make up the balance. It is not easy to determine the regularity of school attendance as the official statistics do not show the average attendance. An estimate made in 1886–1887 from the attendance at two selected dates gives an average equivalent to 75 per cent. of the annual enrollment. In Paris the average attendance rises to 91.64 per cent. of the enrollment in the primary schools for children of the compulsory age. The percentage is certainly much lower in the country, still reports from particular districts give a very favorable view of the workings of the school law. An inspector of Puget-Théniers, a mountainous district in south-eastern France, reports an average attendance of 89 per cent. in 1889–1890 in a village school of Saint-Etiénne. In his inspectional district there are eighty-nine schools supplied with school libraries having a total of 8,864 volumes, and a circulation of 6,712 in 1890. No country in the world has a more able body of inspectors than France. They are the life of the system entering into the details of the school work with the enthusiasm born of knowledge and inspired by sympathy. They assist the teachers with advice, give model lessons, and preside over conferences, which keep up the professional zeal of their teachers. Beside the inspectors general who belong to the central administration and travel annually each through his assigned district to observe and report to the minister, there is an academic inspector for each of the seventeen academic divisions of France (Algiers included), and under these four hundred and fifty primary inspectors, or one for every one hundred and fifty primary schools. Their salaries range from $560 to $720 per annum, besides travelling expenses allowed at the rate of $2 a day. They are selected upon the

results of a rigid examination in which professional as well as general knowledge is tested.

The system reaches its highest possibilities in Paris, the city sparing no expense to make its schools models for the world. In 1887-1888 the current expenditure per capita of enrollment in the elementary primaries (i. e., for children six to thirteen years) was $23, and in the infant schools (*écoles maternelles*) $17.70. Of the one hundred and sixty-five schools for boys one hundred were provided with workshops, and the rest were to receive this additional equipment. All the girls have instruction in sewing and in the cutting and making of garments. The Paris schools attract pupils from the provinces and from Belgium, and although the school population is much more homogeneous than that of London or New York, it presents a greater variety of types than are usually found in France. The Paris pupils are studious and docile. Much is done to stimulate and reward ambition. Prizes are offered, public competitive exercises conducted with effective ceremony, while the attendance of the poor is facilitated by substantial aid in the way of food and clothing. For this last service and the purchase of prizes, the city provides funds which amounted in 1888 to $234,443. From these funds, among other provision, there was a daily gratuitious distribution of 12,263 school dinners, and the sale at about three cents each of 15.965 meals.

The enrollment in elementary schools, public and private, not including infant schools, was 193,251 (boys, 92,522; girls, 100,729). Of this number 62.8 per cent. were in public schools. The teachers in the latter numbered 3.002. The salaries paid by the city are higher than the rates fixed by the state. Men receive an average of $879 for head teachers and $494 for assistants; women $661 and $340 respectively. In addition there is an allowance in lieu of residence amounting to $160 per annum for head teachers and $120 for others.

Women in the Superior Council of Public Instruction. — The Superior Council which is the deliberative head of the French educational system comprises representatives of every grade of instruction, elected by their peers. The interests of infant schools (*école maternelles*) have been represented since 1886 by Mme. Pauline Kergomard, who is now a candidate for reëlection. In a letter announcing her candidature for the fourth time, Mme. Kergomard states that she is induced to do so solely by the fact that no other woman seeks to assume the responsibility. Sympathizing with the views of those who secured the recognition of women in this important body, she urges upon her sisters in the teaching profession the importance of living up to the honor and the obligation of the position. In her letter which is dignified and forcible she discusses also the need of a larger representation

of primary instruction in the council, and especially the importance of a hearing in the permanent section, whose advice really determines educational movements.

Examination of Recruits.—M. G. Jost who keeps a watchful eye on the educational status of all countries has recently published an account in the *Manual Général de l'Instruction primairé*, Paris, of the examination of Swiss recruits from which the following data are taken. Every conscript is examined in reading, arithmetic, composition and civic knowledge. He receives a certain number of marks for each subject according to which he is rated as very good, good, passable, bad, naught. The results are entered in the little book or certificate of his military service. Failure at the examination obliges him to frequent the camp school while his brother soldiers are free. This is a humiltation which every young man seeks to avoid. The results of the examination in 1890 show that for every one hundred conscripts twenty-five are ranked as very good, thirty-seven good, twenty-nine passable, eight bad, one naught. M. Jost warns his countrymen that these are better results than those shown by the French recruits, and he instances two battalions, one drawn from northern France in which forty-two out of two hundred and sixty-nine fresh recruits (15 per cent.) were illiterate, and another pertaining to central France in which three hundred and fifty-five out of one thousand one hundred (32 per cent.) were illiterates. The statistics for the country at large give 10 per cent. of illiterate conscripts. With this, M. Jost compares the statistics of Prussia, giving only one illiterate conscript on one hundred. The military service of European countries is, at least it appears, an incitement to personal improvement.

ENGLAND.

Conference of the National Union of Elementary Teachers.—The annual conference of the N. U. E. T. held this year at Leeds was one of the most interesting in the history of the organization. The death of the president, Mr. George Collins, early in the year, threw the responsibilities of the office upon the vice-president, Mr. Taxall. The fact that Mr. Taxall is a candidate for a seat in the House of Commons increases interest in his official actions. His address bore upon the short comings of the English system of education, especially its failure to get firm hold of the poorest children and the unsatisfactory prospect which it holds out to teachers. The incoming president, Mr. Macnamara, dwelt particularly upon the evils of absenteeism, and advocated an effective administration of compulsory laws. The social features of the conference bore witness to the liberality and friendly spirit of the great manufacturing city in which it was held.

PRUSSIA.

New Programmes for Secondary Schools (*i. e.*, *gymnasia*, *realgymnasia*, *and oberrealschulen*). The official programmes recently published, present the final outcome of the movement inspired by the emperor for the reorganization of secondary instruction. The changes authorized amount in brief to the following: The reduction of time devoted to Greek and Latin in the gymnasia; sensible modification of the character of the realschools by the diminution of Latin; the improvement, moral, and material, of the modern realschool (i. e., secondary school without Latin). The extent of the changes can be seen by the comparative summaries of the weekly time tables for all the classes of each grade of schools, below.

The regulations go far toward putting the certificates showing the results of the leaving examinations of the three classes of schools upon the same footing. The right to confer the certificate of maturity is given for the first time to the oberrealschulen. The certificate from this class of schools however, secures admission only to the scientific faculties of the universities, those of the realgymnasia admit also to courses requiring modern languages. The leaving certificate of the gymnasia still carries the higher distinction and admission to all the faculties.

I. GYMNASIA, 9 CLASSES.

SUBJECTS OF INSTRUCTION.	TOTAL HOURS.	
	NEW PROGRAMS.	OLD PROGRAMS.
Religion,	19	19
German and Historical Narrations,	26	21
Latin,	62	77
Greek,	36	40
French,	19	21
History and Geography,	26	28
Mathematics,	34	34
Natural History,	8	10
Physics, Chemistry, Mineralogy,	10	8
Writing,	4	4
Drawing,	8	6

II. REALGYMNASIA. 9 CLASSES.

III. OBERREALSCHULEN. 9 CLASSES.

	REALGYMNASIA.		OBERREALSCHULEN.	
	NUMBER OF HOURS.		NUMBER OF HOURS.	
SUBJECTS,	New Programs.	Old Programs.	New Programs.	Old Programs.
Religion,	19	19	19	19
German and Historical Narrations,	28	27	34	30
Latin,	42	54	—	—
French,	31	34	47	56
English,	18	20	25	26
History and Geography,	28	30	28	30
Mathematics,	42	44	47	49
Natural History,	12	12	12	13
Physics,	12	12	13	14
Chemistry and Mineralogy,	6	6	11	9
Writing,	4	4	6	6
Drawing,	16	18	16	24

A. T. S.

CORRESPONDENCE.

Editor of EDUCATION: —

In the various institute and association meetings to be held during the summer months, there will be, doubtless, much discussion over the grammar school question. The recommendations made by the New England Association of Colleges for changes in the programme of studies for the grammar school will receive attention, and papers will be read advocating or denouncing the proposed changes. I wish to offer a word to those who may participate in these discussions and it is this: That the speakers treat the question honestly and speak their honest convictions. It may seem unnecessary to ask that this be done, but from what I know of discussions on other subjects in previous

years, I am forced to believe there will be uttered thoughts this year which are given voice only to secure the applause of the audience. I have known of papers read in conventions which were prepared directly under the influence of the managers of the affair, the authors totally ignoring their honest opinions and convictions. The managers, astute and shrewd, desired to be on record as favoring a certain measure, and secured their men to advance their projects regardless of their opinions. Brethren, this is a good subject to be honest about. Let every speaker have the courage of his opinions and the audacity of their expression. Let the spirit of candor be in every meeting and let the truth be told.

Mass. VETERAN.

We can with difficulty give credence to Veteran's charges of dishonesty on the part of speakers at conventions. So far as our experience goes we have always found every essayist to give his honest, deliberate convictions on the subject which he discussed. Veteran's exhortation is given place here, not because we believe it to be necessary, but because it shows how some people judge of others, even of their own profession.

BIBLIOGRAPHY OF CURRENT PERIODICAL LITERATURE UPON EDUCATION.

The following bibliography of current periodical literature includes articles upon education and other subjects calculated to interest teachers. Only articles from periodicals not nominally educational are mentioned.

Bacteria, Some uses of. Dr. H. W. Conn. *Science*, May 6. On the micro-organisms which usually do not cause disease. No farm would thrive unless stocked with them. Decay and disintegration of dead plants and animals due to bacteria. Clover enriches soil by adding to it nitrogen, which it takes from the air after its roots have been entered by bacteria. Yeasts are species of bacteria.

Chaucer's Prosawerken zu seinen Dichtungen, Ueber das Verhältniss von. Emil Koeppel. Archiv f. d. Stud. d. neu. Sp. u. Lit., 87, 1. "Chaucer's study of the writings of Saint Hieronymus and Pope Innocent III. has strongly influenced his poems. The poet received a not less deep and lasting impression from a tractate on the seven deadly sins, the confessional, etc., which he probably translated out of the French, and finally put into the mouth of his Parson."

Child and the Savage, The. A Study of Primitive Man. *Blackwoods*, April. The new-born infant shows instincts, which, if not developed are easily overlooked, but which mark the evolution of the race. The young of any species or of kindred species are more alike than are the adults; the young of tame animals bear many resemblances to the young of the allied wild species. Children are sympathetic, after they have been educated to be so. We should say not that the savage is like the child, but rather that the child is like the savage.

Christianity in the East. Rev. S. A. Barnett. *Contemporary*, April. The early Christians followed Moses and the Prophets; they had the Law first, then Grace. The Eastern peoples need the Old Testament more than the New, the law of stern denunciation rather than the gospel of forgiveness.

Comenius als Geograph und Natur-

forscher. S. Günther. *Ausland*, Apr. 16. The writer enumerates the teachings of Comenius which bear on these subjects. He was the originator of *Heimathkunde*, beginning geography at home.

Confessionslose Religion. William Bender. *Deutsche Revue*, April. Referring to the late proposed Prussian school law. "We owe our escape from the religious wars, neither to the churches, nor to the state, but to creedless Christianity. If church and state insist on sectarian religion in the schools, then the demand will make itself heard for complete separation of church and state, and complete removal of the church from the public school."

Culture and Anarchy. *Quarterly Review*, April. Review of Blanche Lady Falaise, by J. H. Shorthouse; Tess of the D'Urbervilles, by Thomas Hardy; and David Grieve, by Mrs. Ward. "We have fallen upon a barren time, which we are straining every nerve to persuade the world to take for a rich one. As the intellectual forces grow weak, the animal instincts grow strong. With these apostles of culture, all the old stock ideas of decency and order, of morality and decorum, of good manners, good taste, good sense, have been carted into the limbo of worn out things."

Criminalité feminine, La. M. F. Ferrero. *Revue Scientifique*, March 26. The sexual nature, while not so passionate in woman as in man, is the basis of her altruistic feelings, such as maternal love, devotion, pity; and in her, it is the most frequent cause of crime. Natural selection and sexual selection have operated strongly in softening the feminine nature and making her complaisant and gentle, as well as graceful and beautiful, for these are the qualities admired by men.

Education, the true aim of. W. J. Greenstreet. *Westminster*, April. On Education and Heredity, by Guyan, and Education from the National Standpoint, by Fouillée. These writers emphasize the value of instruction in morals in the school course as an organizing power. "Man has created his own moral laws by the higher powers acquired in the course of evolution by education, partly spontaneous, partly forced, partly individual, partly collective. It is clear that heredity plays with education a part in the genesis of the moral instinct. A moral atmosphere must be created by an organized body of suggestions. Good should be discussed not only from the standpoint of utility and social necessity, but also of beauty. Virtue can be taught, for there is in the moral good a private and public utility, and æsthetic beauty, and a philosophic rationality." Appended is a syllabus of Fouillée's course.

Foresters, The. Alfred Lord Tennyson. Reviewed in *Academy*, April 9. "Tennyson, the dramatist, labors under the curious disadvantage, that he has always to enter the lists against Tennyson the lyrist, the elegist, the idyllist. He is his own most formidable rival. A spiritual conflict has in every case formed the basis for the subject matter of his dramas. The Foresters is a lighter and more airy task than usual, a Midsummer Night's Dream."

French Decadence, The. *Quarterly Review*, April. "In Maupassant and his like, we find evidence that the upper and middle classes of the French have fallen into a most unhealthy condition. We look upon the tribe of Zolas, Renans, Bourgets, Daudets, and Maupassants as among the most dangerous enemies of France. Without morality, no art or science, however advanced, will save the French people from ruin."

Froude's Appointment. *Saturday Review*, April. "The appointment of Mr. Froude in Mr. Freeman's place as Regius Professor of Modern History at Oxford, is humorous, unexpected and satisfactory. So little direct teaching influence is exercised by professors at the English universities, that it is of much more importance to secure distinguished personalities than to provide painstaking pedagogues."

How long can the earth sustain life? Sir Robert Ball. *Fortnightly*, April. At present rate of radiation, age of sun probably eighteen million years; four-fifths seem to have been already past; it may hold out for four or five, but not for ten million years longer.

Imitation. Jean Honcey. *Revue Bleue*, April 10. On Les Lois de l' Imitation, by M. Tarde. "Society is imitation, and imitation is a kind of somnambulism. Humanity is like a great crowd on the march, led by its chiefs, patriarchs, prophets, kings, priests, sages, scholars and philosophers. When men would rest satis-

fied at some stage, they hear the command: 'Advance or die.' Those which do drop out of the procession are like the species of animals which no longer produce important variations, and are destined to become extinct."

Mohammed, The Life and Teachings of, or the spirit of Islam. Syed Ameer Ali. Reviewed in *Quarterly*, April. "This book enables us to contemplate Islam from within and Christianity from without. As a reforming movement in Arabia, Islam represents an advance in religious thought. We cannot admit that, considered as a universal religion, it represents an advance upon Christianity. The conception of the family which Mohammed has stereotyped is incompatible with the higher stages of human development."

Natural Analogies. Dr. S. V. Clevenger. *American Naturalist*, March. Cope's law of Acceleration has analogies in education. "In past generations, boys up to fourteen and sixteen years of age were greatly influenced by dime novel, Indian and pirate tales. No matter what the cause may be (probably the dissemination of better reading matter), it is the boy of ten years, or younger, now-a-days, who affects such reading, and this may be likened to a condition existing in the days of knight errantry, when cock and bull stories of fights with dragons and giants were rife among every class of adults."

Quatrefages. *L'Anthropologie*, III., 1. The master of French anthropology—1810–1892. Distinguished for his loyalty and goodness. He was a conservative as compared with Darwin, a progressive as compared with Agassiz, always a strenuous upholder of the unity of the human race.

Spoken Greek, Ancient and Modern. A. N. Jannaris. *Contemporary*, April. The development of Greek was determined by the church and by revivals of the classic spirit, so that the change was less than from Latin into the Romance languages.

Theology and Morality in Modern Fiction. *Church Qu. Rev.*, April. Review of David Grieve, by Mrs. Ward; The Wages of Sin, by Lucas Malet; Darkness and Dawn, by Canon Farrar. The first is regarded as irreligious, the second as immoral, the third as florid.

Travels amongst the Great Andes of the Equator. Edward Whymper. Reviewed in *Academy*, April 16. Travels of seven months in 1879–'80; eleven years spent in digesting and giving form to the rich materials. "The ingrained indolence of the Spanish-American peoples is shown in their inveterate habit of procrastination. The equality of temperature and the equality in the length of the days, and the presumption that to-morrow will be like to-day, may have much to do with it. It would be good for these people to have a winter."

Woman's Place in Modern Life. Madam Adam. *Fortnightly*, April. "To unify the minds of her sons and daughters, rather than allow them to remain in different spheres; to inspire her husband with the desire to make her a sharer in his conceptions and enterprises; to seize every occasion of participating, within the measure of her capacities, in masculine ambition and effort—should be the first steps henceforth taken by woman towards a future where her position and her influence will be duly recognized and more accurately marked."

J. P.

AMONG THE BOOKS.

Mr. G. W. Rollins of the Boston Latin School has performed a fine bit of editorial work in annotating Erckmann-Chatrian's MADAME THERESE. Ginn & Co., Boston. This is a famous novel based upon events in the French Revolution and will be read by students, in course, with pleasure and profit.

To the College Series of Greek authors there has been added Xenophon's HELLENICA, Books V.–VII., edited by Charles E. Bennett, Professor in Brown University. The notes are on the same page as the text and are full and scholarly. The text is large, clear and very legible, and contrasts strongly with the blurred texts of a score of years ago. Ginn & Co., Publishers.

We acknowledge the receipt of "THE NEW EMPIRE," by A. O. Howland, a notable Canadian contribution to the discussion of our political history and international relations. New York, The Baker & Taylor Co.; Toronto, Hart & Company.

Andersen's "PICTURE-BOOK WITHOUT PICTURES" is one of the most charming of the many delightful books written by this prince of story-tellers. We are glad to welcome it as a text-book for young students in German, edited with notes and a vocabulary by Dr. Wilhelm Bernhardt. The notes are very full and every historical and art reference is carefully explained. Illustrations abound. D. C. Heath & Co., Boston, Publishers.

"ALDEN'S CYCLOPEDIA OF HISTORY," is complete in two small volumes which cover, nevertheless, the entire list of countries of the world, from Abyssinia to Zululand (from B. C. 5,004 to A. D. 1892.) Being somewhat familiar with the Hawaiian Kingdom, from a two years' residence, we read with interest the three pages given to the history of that land. It was a fair account, condensed but inclusive and satisfactory. From a part we judge the whole and commend the work as handy for ready reference. John B. Alden, Publisher, New York. $1.00.

HAND BOOK OF SCHOOL GYMNASTICS is the title of Baron Nils Posse's little manual for instruction in the Swedish gymnastics. The fundamental positions are first given and fully illustrated and explained. So clear and definite are the instructions given that a novice in the system can readily understand the principles and apply them. One hundred progressive tables of exercises are given; these are so arranged as to suit all the conditions of any grade of school. Baron Posse is the pioneer in this country of the Swedish system, and his manual will be a grateful contribution to all teachers. Published by Lee and Shepard.

Gustave Freytag is held in high esteem in Germany, and his works have had a strong influence. It is strange that so few of his books have been prepared for use by students of German in this country. It was surely a happy thought that led Miss Ida W. Bultmann, Teacher of German in the Norwich Free Academy to condense and edit for the use of American schools and colleges Freytag's famous novel, SOLL UND HABEN (Debit and Credit.) The length of the novel required its abridgement, but this in no manner interferes with the coherency of the story. The notes are intelligent and entirely satisfactory and stamp Miss Bultmann as a competent editor and annotater. Published by Ginn & Co.

Dr. J. H. Van Amringe, Professor of Mathematics in Columbia College, has edited Dr. Charles Davies's ELEMENTARY ALGEBRA (American Book Company) which, retaining all the merits of the old edition, shows marked advance over the original work. The old edition has been in use for many years, and has done yeoman service in the classroom. The demands of the times required a new edition and this new book brings to teachers of the old book much that will enrich the subject, while it does not take away any of the merits which make the original edition one of the best of elementary text-books on Algebra. Both the new and the old editions can be used in the same class without confusion, since the article numbers remain unchanged.

"THE CHINESE: THEIR PRESENT AND FUTURE; MEDICAL, POLITICAL AND SOCIAL," is by Robert Coltman, Jr., M. D., and is published in one handsome Royal Octavo volume, cloth at $1.75; by the F. A. Davis Co., 1231 Filbert Street, Philadelphia, Pa.

The Lectures and Discussions at the sixty-second annual meeting of the American Institute of Instruction, held at Bethlehem, N.H., last July, have been published by order of the Board of Directors, in a neat volume. Boston, American Institute of Instruction, 1891.

Ginn and Company have issued a High School Edition of "BUSINESS BOOKKEEPING," an excellent manual of modern methods in recording business transactions, by George E. Gay of the Malden High School; also "THE CRITIC'S TABLET," for use in recording criticisms of students in literary societies, lyceums, and classes in English, elocution, and oratory; by Robert I. Fulton, A. M., and Thomas C. Trueblood, A. M. Price 60 cents.

One of a series of pretty little monographs on notable men and women of modern literature is the "LIFE OF HENRY WADSWORTH LONGFELLOW," in the "Great Writers" series, published by Walter Scott, 24 Warwick Lane, Paternoster Row, London. This volume is by Eric T. Robertson, and gives an interesting sketch of Longfellow's life, together with a critical history and a bibliography of his works. Price of each volume in the series one shilling.

"TALES FROM HERODOTUS," with Attic Dialectical Forms, is a pleasing selection of easy Greek stories, by G. A. Farrell, M. A., Assistant Master of St. Paul's School, published by Macmillan and Co., London and New York. Besides twenty tales there are notes, two vocabularies, and an index of non-Attic words. It is a "handy" little volume, neatly gotten up, and comprehending much material in small space. Price 40 cents, post paid.

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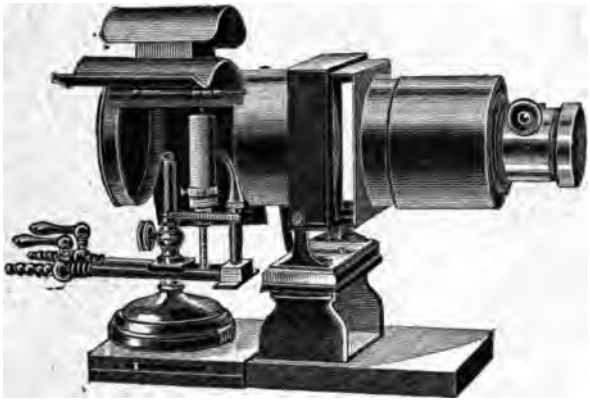

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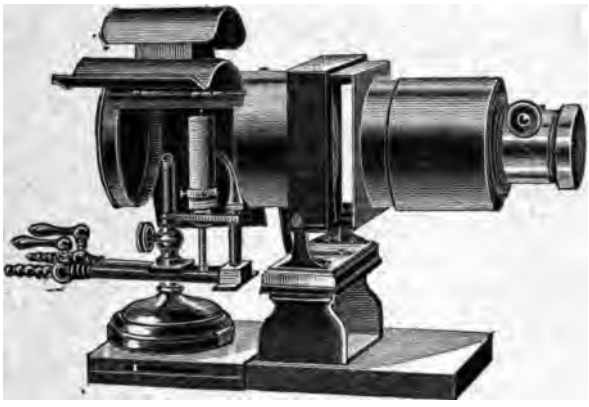

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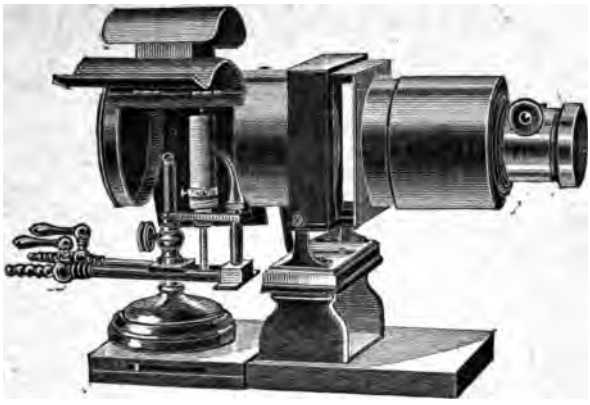

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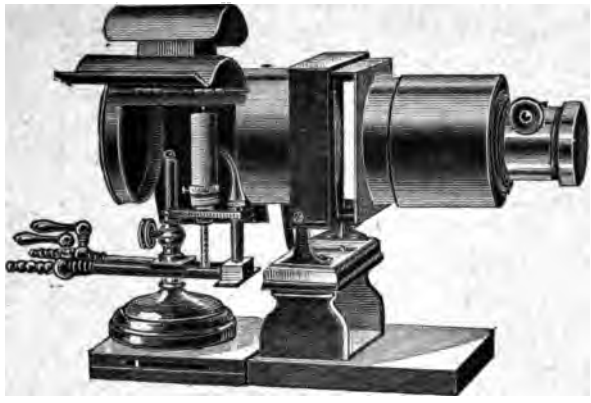

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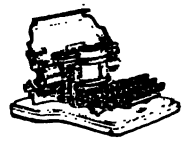

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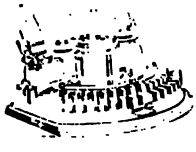

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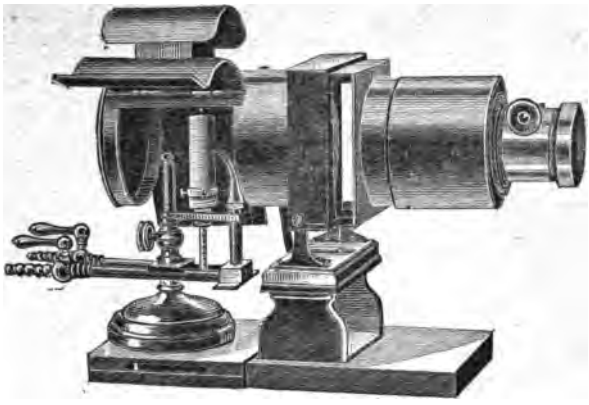

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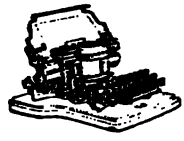

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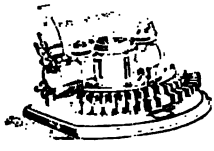

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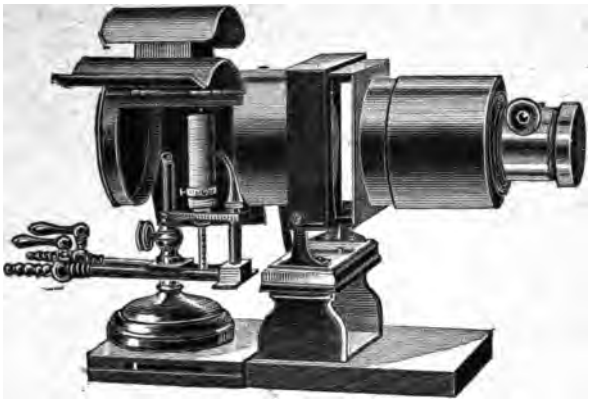

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FRANK H. KASSON, Editor.

FRANK H. PALMER, Associate Editor.

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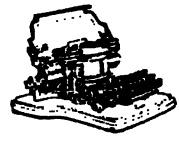

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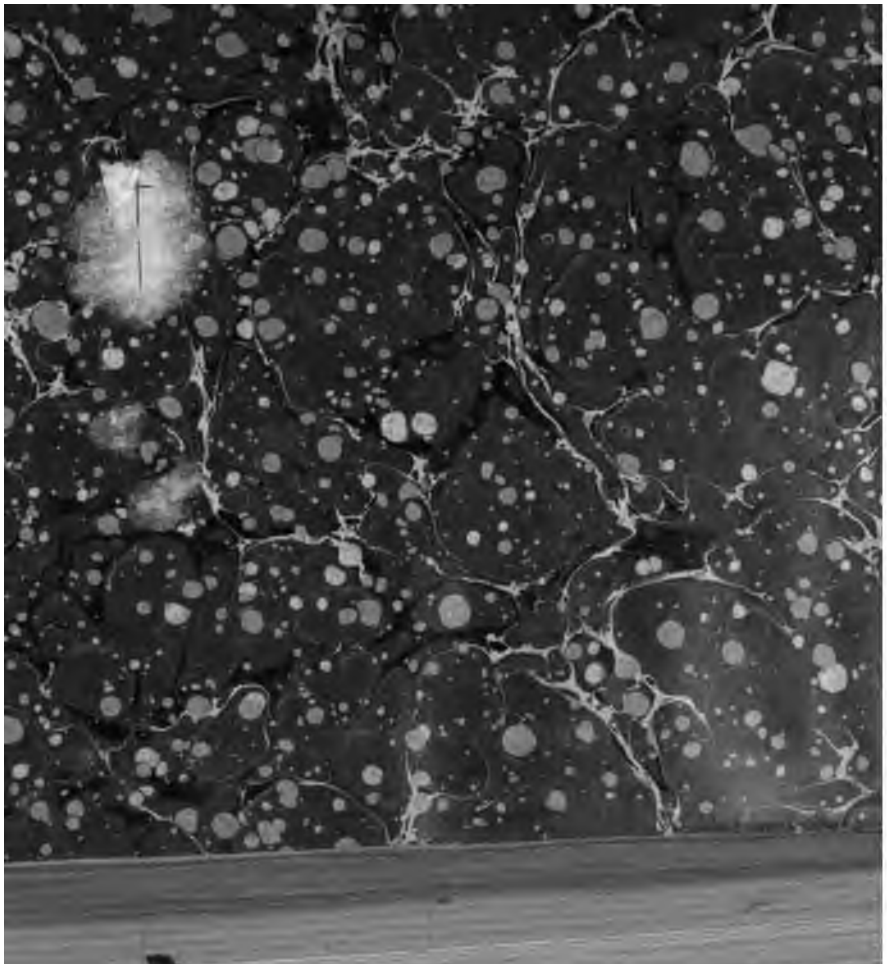

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